



Youth in Northern Ireland: Linking Violence Exposure, Emotional Insecurity, and the Political Macrosystem

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**Youth in Northern Ireland: Linking Violence Exposure, Emotional Insecurity,
and the Political Macrosystem**

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Abstract Growing up in the aftermath of armed conflict puts youth at a higher risk for psychopathology—particularly in societies like Northern Ireland which continue to be characterized by intergroup tension and cyclical violence. This risk may be heightened during adolescence, when youth are beginning to explore their identities and are becoming more aware of intergroup dynamics in both their immediate communities and the broader society. It is also during this stage when youth increasingly witness or engage in antisocial behavior and sectarian activities. A series of studies in Belfast conducted by Cummings et al. (2014, *Child Dev Perspect*, 12(1), 16–38; 2019, *J Clin Child Adolesc Psychol*, 48(2), 296–305) showed that adolescents' exposure to sectarian violence resulted in heightened emotional insecurity about the community and subsequent adjustment problems. Though the impact of direct exposure to violence is well documented, few studies have accounted for the influence of sectarianism that occurs outside of one's immediate environment. These influences may include the general climate surrounding events that are not experienced firsthand but are nonetheless salient, such as the overarching levels of tension between groups or societal discourse that is threatening to one's identity. These higher-level influences, often referred to collectively as the macrosystem, are a necessary component to consider for adequately assessing one's socio-developmental environment. Yet,

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measurement at this level of the social ecology has proven elusive in past work. The current study advances research in this area by using newspaper coding as a method of measuring the political macrosystem in Northern Ireland and assessing whether a tense or threatening climate serves as an added risk factor for youth living in Belfast.

In the current study, we measured sectarian violence at the level of the macrosystem by systematically collecting and coding newspaper articles from Northern Ireland that were published between 2006 and 2011 ($N = 2,797$). Each article was coded according to its level of overall political tension between Catholics and Protestants, threat to Catholics, and threat to Protestants. When aggregated, these assessments reflected the overarching trends in Catholic–Protestant relations during this period. In order to assess the association between these sociopolitical trends and the direct experiences of adolescents, the newspaper coding was linked with five waves of survey data from families ($N = 999$) in socioeconomically disadvantaged areas of Belfast. Using a series of multilevel moderation analyses, we then tested whether intergroup tension and ingroup threat moderated the relation between adolescents’ direct exposure to violence and their emotional insecurity. These analyses were followed by a thematic analysis of the coded newspaper articles in order to provide further context to the findings.

The results indicated that adolescents’ response to direct exposure to sectarian violence varied based on the political climate at the time of their interview. Overall, the adolescents’ emotional insecurity about the community increased with exposure to sectarian violence. During periods when the sociopolitical climate was characterized by high levels of intergroup political tension, this relation was slightly weaker—regardless of the adolescents’ ingroup (i.e., Protestant vs. Catholic). During periods when the sociopolitical climate was coded as threatening, this relation was weaker for Catholic adolescents. That is, high levels of macro-level threat—particularly events coded as threatening for Protestants—seemed to be a protective factor for Catholic adolescents. Group differences were also found based on the adolescents’ cumulative amount of exposure to sectarian violence. As threat in the macrosystem increased, Catholic adolescents who were directly exposed to higher than average levels of sectarian violence became more emotionally secure, while Catholics with little to no exposure to violence became more insecure. Contrastingly, Protestant adolescents directly exposed to higher than average levels of sectarian violence were more insecure than Protestants with little to no violence exposure.

A thematic analysis of the newspaper articles revealed the categories of events that were viewed by coders as politically tense and threatening. Five primary themes emerged: ineffective policing and justice, family and community unrest, memories of violence, destabilized leadership, and organized paramilitary activity. Many of the articles coded as most threatening

reported on a spike in attacks organized by dissident republican groups—that is, members of the Catholic community with, particularly hardline views. This may be pertinent to the finding that associations between sectarian violence exposure and emotional insecurity were exacerbated during this time for Protestants but not for Catholics. Findings from the thematic analysis provide a deeper examination of the context of events taking place during the study period, as well as their potential bearing on interpretation of the macro-level effects.

In conclusion, these findings illustrate how one's response to the immediate environment can vary based on shifts in the political macro-system. The current study thus contributes conceptually, empirically, and methodologically to the understanding of process relations between multiple levels of the social ecology and adolescent functioning. These results may further inform the design of future interventions and policies meant to lessen the impact of political violence. The methods used here may also be useful for the study of other contexts in which macrosystem effects are likely to have a salient impact on individual wellbeing.

“It didn’t happen to me,” says Northern Irish poet Catherine Brogan (BBC, 2011). “It happened on TV, to friends I’d see.” In her spoken-word performance, Brogan discusses her experience as a thirteen-year-old girl growing up in Omagh at the time of the bombing that killed 29 people and left hundreds injured. “I heard the bomb blast, watched the newscast, couldn’t ring on the phone, but I never put it in a poem, cause it wasn’t personal. People had come out worse and all.” The event described in her poem marks the single greatest loss of life since the Troubles began in the late 1960s, and it happened after the signing of the peace accord in Northern Ireland. Throughout the poem, Brogan notes the ongoing impact that this event has had: “It’s ten years from the day, and it still hasn’t gone away no matter how much I say it didn’t happen to me anyway.” Researchers have published extensively on the impact of sectarian violence on youth growing up during the post-accord period, but few have empirically accounted for the impact of the broader sociopolitical events happening around them, such as the Omagh bombing and the heightened tension that surrounded it. Although these events may not be happening *to them*, they are still a part of one’s lived experience of the conflict and can alter how youth make sense of violence and the ways in which they respond to it.

Accounting for the myriad and complex ways in which political violence impacts youth development has implications that extend beyond the specific circumstances in Northern Ireland. Around the globe, the number of children and youth who are growing up in the midst of violent conflict is immense. As of 2017, 14.2 million people under the age of 18 are forcibly displaced by armed conflict and persecution, and this number—already the highest recorded figure since World War II—is expected to grow exponentially over the next decade (UNHCR, 2017, 2018). The 2019 calendar year also marked a 70% increase in the number of grave violations committed against children in regions of armed conflict, the consequences of which often reverberate for long periods after the violence has subsided (United Nations, 2018). The lives of youth continue to be disrupted by cyclical spikes in violence, cross-border operations, and intractable conflicts—which are defined as those that have persisted over long periods of time and include complex interrelated issues such as identity conflicts, structural inequality, and socio-psychological barriers to transformation (Coleman, 2000). All of this has served to weaken the child protections that are typically provided by families, communities, and the legal system. Added to these figures is the ongoing impact of intergroup division, trauma,

structural violence, and shattered social systems in contexts where people are trying to rebuild after violence and create sustainable and transformative changes to society. Addressing the challenges posed by these evolving global crises requires psychologists and public health professionals to make dramatic shifts in the way they conduct international research, design interventions, and translate knowledge about violence into effective and sustainable policies (Seddio, 2017). In this context, the study of youth and development has become increasingly vital.

If one were to review the body of psychological research in areas of political violence and armed conflict, it would paint a dismal picture of youth outcomes. More often than not, this research has shown that youth exposure to violent conflict results in post-traumatic stress, depression, anxiety, or some combination of the three (Belsky, 2008; Furr, Comer, Edmunds, & Kendall, 2010; Hadi & Llabre, 1998; Thabet, Abed, & Vostanis, 2004). Other studies have shown that violence exposure can result in behavioral problems such as hyperactivity, aggression, or substance abuse (Al-Krenawi & Graham, 2012; Boxer et al., 2013; Schiff et al., 2006; Taylor, Merrilees, Goeke-Morey, Shirlow, & Cummings, 2016; Thabet, Karim, & Vostanis, 2006). To make matters worse, the strength of these symptoms and the likelihood of experiencing them may be even higher for youth exposed to chronic violence (Barber, McNeely, Olsen, Belli, & Doty, 2016; Shaw, 2003), different types of violence (Ford & Delker, 2018), or violence across multiple domains (e.g., at home, in the community, in society at large; Cummings, Taylor, Merrilees, Goeke-Morey, & Shirlow, 2016b; Dubow et al., 2010). Beyond the psychological toll, there is increasing evidence to show that the effects of violence can manifest at a cellular level (Lee, 2015; Moffitt, 2013). Researchers are only beginning to understand the physiological impact of traumatic experiences and the processes through which trauma can spread between people and from one generation to the next (Lehrner & Yehuda, 2018; Sangalang & Vang, 2017). Despite the many risks that political violence can imply for youth growing up in these contexts, not everyone develops psychopathology. Many—perhaps even a majority—have managed to thrive despite the circumstances (Betancourt & Khan, 2008; Bonanno, 2004; Masten & Narayan, 2012). A wide array of intraindividual characteristics, relational factors, and community influences can serve to exacerbate the impact of violence or to protect youth against it. It is critical for psychologists to disentangle these influences by designing studies that apply a systemic, process-oriented perspective—exploring why, how, for whom, and in what circumstances political violence redirects the lives of youth.

Bronfenbrenner's social-ecological model (1979) provides a useful framework for examining these issues by enabling researchers to conceptualize the multiple layers of context and intraindividual characteristics that differentially influence development, as well as the proximal processes that drive these changes over time. As described in greater detail below, in Bronfenbrenner's model, the individual is situated within five nested systems.

The most proximal of these is the *microsystem*, which includes the various people and settings with which the individual interacts directly (e.g., family, school, neighborhood). The *mesosystem* includes influences on the individual that arise from interactions between microsystem settings (e.g., the interaction between a child's teacher and parents). The *exosystem* includes the settings and relations occurring outside the individual's immediate environment that affect the child indirectly (e.g., the parents' workplace, local government). The *macrosystem* also includes effects outside the individual's immediate environment, but rather than concrete settings and relations, this system encapsulates less tangible, overarching forces that influence how an individual interprets and responds to their immediate context (e.g., the sociopolitical climate, ideologies, group narratives). Finally, the *chronosystem* incorporates time-based effects (e.g., generational effects). An increasing number of psychologists researching youth wellbeing in contexts of political violence have applied this framework using process-oriented and longitudinal designs, which have broadened our understanding of development to include processes within the family, school, and community settings, and to address ways that these may change across historical time (Aber et al., 2017; Cummings, Merrilees, Taylor, Goeke-Morey, & Shirlow, 2017a; Huesmann et al., 2017; Sharma, Fine, Brennan, & Betancourt, 2017).

Despite the influx in social-ecological research, few developmental studies have incorporated assessments of the macrosystem as a potential influence on individual wellbeing. Most studies on youth and political violence focus on risk and protective factors within the individual's immediate setting without giving systematic attention to the sociopolitical phenomena operating in society. Tense or threatening events in the political climate—like the bombing in Omagh—have the potential to be salient stressors for individuals even when their direct environment remains largely unchanged. More recently, the need to account for macrosystem effects has become especially evident as individuals across the world sit under the influence of the global COVID-19 pandemic, and those in the United States face the added effects of intense political division and a spike in tension surrounding racial injustice. These events have made more urgent the importance of understanding the processes through which changes in the macrosystem may impact individuals.

The current study incorporates macrosystem assessment within the context of post-accord Northern Ireland. Although a peace agreement had been signed roughly a decade prior to the study period, its provisions were still being debated and implemented at this time. Violence during this period continued through dissident opposition, paramilitary splinter groups, sectarian-motivated crime, and rioting. Some suggested that the persistence of such a tense political atmosphere led intergroup divisions to become even further entrenched (Mac Ginty & du Toit, 2007; Sisk, 2006). The current study assesses whether this political atmosphere may have served as an added risk factor for youth in these contexts. Issues of measurement were addressed using coded news reports to assess the macro-level trends in

Catholic–Protestant relations from 2006–2011. The newspaper coding was then linked with a longitudinal survey of mothers and children in Belfast—a microsystem measure. This combination of macro- and micro-level data tested whether the overarching sociopolitical climate interacted with more proximal processes to impact youth. Specifically, multilevel modeling was used to test whether intergroup political tension and ingroup threat at the macro-level moderates the relation between adolescents' *direct* exposure to sectarian violence and their emotional insecurity about the community. A thematic analysis was then conducted in order to provide additional contextualization of the time period and the various themes comprising the newspaper coding. Understanding how the events and dynamics outside of one's direct environment could impact their psychological wellbeing may contribute to the design of more effective therapeutic and policy interventions that lessen the deleterious psychological impact of violence.

I. Ecological Systems Theory

The organizing framework used for this study derives from Urie Bronfenbrenner's social-ecological model, which he first presented in the late 1970s as a response to developmental psychologists' overreliance on tightly controlled experimental designs and physics-based scientific orientation. At the time of his proposal, mainstream researchers in the field primarily drew conclusions about developmental processes based on their observations of individual behavior in laboratory settings that were artificially created and unfamiliar to the participants. These studies largely ignored the role that an individual's broader context can play in their development, including the many influences and interactions within one's family, school, community, culture, and social-political milieus. Through their failure to account for these contextual factors and their use of convoluted laboratory conditions and scenarios, developmental psychologists frequently designed studies that were scientifically rigorous but irrelevant and incapable of addressing the societal issues that children and parents faced (Bronfenbrenner, 1979).

The social-ecological model, also referred to as Ecological Systems Theory, was developed as a means to counter these problems. At the heart of this model is the notion that understanding development requires researchers to consider the entire social ecology in which development takes place (1979). Operationalizing the different layers of contextual influence and incorporating them into research designs would allow psychologists to research real-world environments in a systematic way, thus improving their capacity to develop solutions to real-world problems. To this end, the social ecology was conceived as a series of nested systems with the individual situated at the center (see Figure 1).

The most proximal level is the *microsystem*, which includes all the settings with which the individual interacts directly (e.g., family, school, neighborhood, social groups). This system encompasses all the individual's ongoing behavior, interactions with others, perceptions of how they are supposed to behave, and any "social and symbolic features that invite, permit, or inhibit engagement" in the environment (Bronfenbrenner, 1979, 1993, p. 15). These proximal processes are often the most salient for individuals, and as such, they tend to be the focus of developmental research.

The *mesosystem* refers to any effects on the individual occurring from interactions between or among microsystem settings. These interactions can take the form of multisetting participation, linkages between settings, inter-setting communications, or inter-setting knowledge (Bronfenbrenner, 1979). For instance, the mesosystem includes how a child's experiences at home can

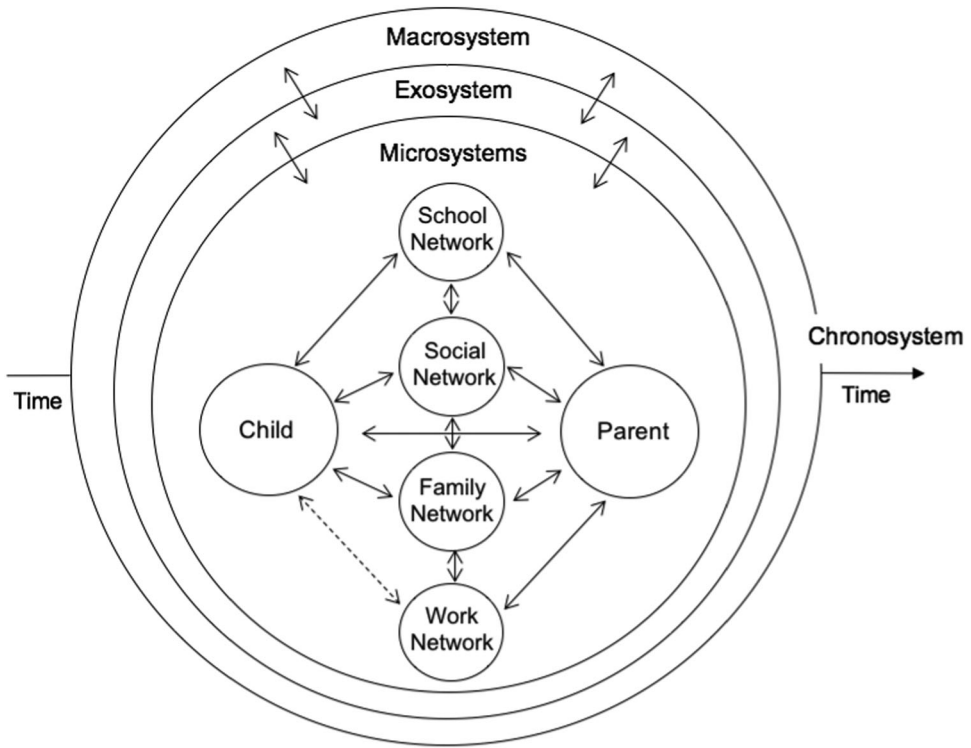


FIGURE 1.—Bronfenbrenner's social-ecological system. In this illustration, the individual child and parent interact with multiple microsystems that include their work, family, social, and school networks. The interactions between each of these microsystems comprise the mesosystem. Also included are the exosystem (concrete influences existing outside the individual's direct environments), macrosystem (intangible influences that transmit meaning), and chronosystem (influences based on age and time period). This image is an adaptation of Lerner and Castellino's developmental contextual model (2002).

have implications for their academic performance inside the classroom. It may also include how interactions between a child's neighborhood and peer group can impinge on children's behavior.

The *exosystem* begins to incorporate factors outside the individual's immediate environment. It includes a wide array of concrete settings and processes that affect individuals through a two-step process. First, a setting that does *not* contain the developing person directly impacts one or more of the microsystem settings. Second, something within the altered microsystem influences development (Bronfenbrenner, 1979). Exosystem settings may impact those who interact with the developing individual on a daily basis (e.g., effects of the parents' workplace on the family system), or they can involve decisions that affect the individual's quality of life (e.g., health and welfare services, government agencies, law enforcement).

The *macrosystem*, which is the focus of this study, also includes effects emanating from outside the individual's immediate setting, but it tends to be

more abstract. The macrosystem does not refer to an actual setting or interaction but to the overarching societal patterns that inform activities occurring at the concrete level. For instance, macrosystem factors may include cultural norms, ideologies, or group narratives that are “carried, often unwittingly, in the minds of the society’s members” (Bronfenbrenner, 1977, p. 515). These forces comprise the cultural or sociopolitical climate of a given time period and can ultimately influence decisions that shift societal operations or the ways in which individuals behave, interact, and interpret events. Distinctions between the exosystem and macrosystem may sometimes be subtle. Relating to the current study, the specific events covered in a news report are part of the exosystem, while the political tension and ingroup threat that these reports collectively generate are part of the macrosystem.

Finally, the *chronosystem* introduces the element of time and its influence on individual development. According to Bronfenbrenner (1986), this system includes the amount of continuity or discontinuity in an individual’s immediate setting (microtime), the cumulative effects of continuities or discontinuities as they carry across multiple settings (mesotime), and the myriad ways in which an individual’s life is embedded in and shaped by the historical time period (macrotime).

Although the social-ecological model debuted 40 years ago, it continues to be one of the most ubiquitous theories in developmental psychology. It is important to note, however, that Bronfenbrenner made a number of revisions and clarifications to his model throughout his career that have sometimes gone unnoticed (Tudge, Mokrova, Hatfield, & Karnik, 2009; Tudge, Payir, Merçon-Vargas, Cao, & Liang, 2016). According to Darling (2007), many psychologists responded to the social-ecological model by designing studies that overemphasize context without paying enough attention to proximal processes or the active role of the developing person. Bronfenbrenner himself signaled that “in place of too much research on development ‘out of context,’ we now have a surfeit of studies on ‘context without development’” (1986, pp. 287–288). Urging psychologists to account for the developmental contributions of the environmental context was a response to the predominant disciplinary methods and traditions used at the time, but the pendulum had swung in the opposite direction and resulted in a body of research that no longer considered the individual’s role in shaping and evoking responses from their environment (Darling, 2007).

The revised “bioecological model” returned attention to the active individual by integrating a behavioral genetics paradigm that focuses more heavily on the individual’s biologically based characteristics and the proximal processes through which individuals interrelate with their environment (Bronfenbrenner & Morris, 1998). This framework includes two principles. First, human development takes place through “processes of progressively more complex reciprocal interaction between an active, evolving biopsychological human organism and the persons, objects, and symbols in its immediate environment. To be effective, the interaction must occur on a

fairly regular basis over extended periods of time” (Bronfenbrenner & Ceci, 1994, p. 572).

Second, the form, strength, content, and direction of these processes may vary based on the characteristics of the individual, the proximal and distal environments, and the nature of the developmental outcome of interest (Bronfenbrenner & Ceci, 1994). Thus, individuals are not passive recipients of environmental influence. They do not respond to the same external events in the same way nor do they develop along the same trajectories. Rather, individuals experience their context subjectively and reflexively, responding to it based on their personal experiences, the meanings they attribute to those experiences, and their personalities. The environment around them also changes as they act on it and influence the behavior of those around them. In this way, individuals interact dynamically and continuously with their environments, with both mutually influencing the other to drive the course of development (Lerner & Kauffman, 1985). When applying this model, it is thus important not to make loose assumptions about development based on the environmental context alone, but to closely examine the ongoing, reciprocal transactions between an individual and the people, objects, and symbols in the environment, as these processes serve as the “engines of development” (Bronfenbrenner, 1999, p. 638; Cicchetti & Valentino, 2006).

In addition to proximal processes, development also depends on the person’s biologically grounded characteristics. Individuals may actively select or create environments conducive to their genetic propensities, or they may exhibit certain qualities (e.g., introversion/extroversion, physical appearance) that impact the way others react to them (Knafo & Jaffee, 2013). One’s trajectory also depends on their disposition (e.g., persistence, inhibition, apathy, responsiveness), mental, emotional, and physical resources (e.g., memory, intelligence, skills, health), and the myriad ways in which each of these intraindividual characteristics interfaces with the different levels of the social ecology described above (Bronfenbrenner & Morris, 1998). In this way, developmentalists who ascribe to the bioecological framework apply the concept of *probabilistic epigenesis*, wherein particular outcomes may be highly probable according to the individual’s genetic blueprint but vary based on a number of environmental factors (Lerner & Kauffman, 1985). After accounting for both proximal processes and these intraindividual characteristics, the full expression of the bioecological paradigm calls for the application of a Process-Person-Context-Time (PPCT) model in which all four of these elements are investigated simultaneously (Bronfenbrenner, 1999). Only through the careful consideration of each of these components can psychologists begin to see the bigger picture of human development.

Toward the end of his career, Bronfenbrenner and his colleague Evans (2000) argued that one of the most urgent challenges for developmental psychologists in the 21st century is in the area of *social* development, a sub-field that applies a “lifespan, cross-species and cross-cultural perspective... on a wide range of topics such as social cognition, peer relationships, social

interaction, attachment formation, emotional development, and children's theories of mind" ("Social Development," 2016). This call emerged from a trend of "growing chaos" in the primary settings where youth spend extended periods of time. Data had increasingly shown that youth were developing in contexts characterized by "frenetic activity, lack of structure, unpredictability in everyday activities, and high levels of ambient stimulation" (Bronfenbrenner & Evans, 2000, p. 121). These chaotic social systems can be extended globally to include the psychological impact of bullying, poverty, racism, gender-based violence, and xenophobia, while certain contexts carry the added chaos of living with, fighting against, and recovering from armed conflict, corrupt systems of justice, and sectarian division. The bioecological model is a particularly useful framework for psychological researchers seeking to understand the impact of these forces, to what extent they interfere with development, and which factors play a role in exacerbating or buffering against these risks. In the current study, this model is applied to assess the extent to which political violence interferes with adolescents' socioemotional development by examining adolescents' direct exposure to violence as well as the presence of tense and threatening events in society at large.

II. A Social Ecological Approach to Youth and Political Violence

Interventions and policies implemented in regions affected by political violence have not always been effective and sustainable, in part because of their tendency to oversimplify conflict and assume a linear progression. In reality, conflict tends to be cyclical as its roots become embedded within multiple systems and institutions, and its effects manifest from the interpersonal to the structural (Adams, 2017). Although there are countless organizations, agencies, and individual researchers studying violence, their approaches are often siloed according to their specific issue area and disciplinary tradition with little coordination or communication about theoretical advances and empirical findings. A systems approach to research on political violence is a more effective alternative, as it allows one to see the interconnections between distinct elements within a context and the broader patterns of behavior (Lederach, 1997; Ricigliano, 2012). Many frameworks have been put forth to help scholar-practitioners better conceptualize these systems. One of the most widely utilized has been Lederach's integrated framework for peacebuilding (1997; see Figure 2).

Like Bronfenbrenner, Lederach also uses a series of vertically nested systems to convey the different levels at which conflict can manifest. This depiction is similar to the bioecological model in that Lederach situates each instance of conflict (issue/microsystem) within the groups surrounding it (relationship/mesosystem), the broader community and institutions (subsystem/exosystem), and the sociopolitical milieu (system/macrosystem). As noted by Adams (2017), "conflict is reproduced and moves back and forth through the system of human development from the micro to the macro levels, provoking interactive and 'contagious' effects that can severely impede human health and development and produce more violence" (p. xvi). Whether we are conceptualizing developmental research or peacebuilding interventions, it is necessary to attend to the ways that political violence manifests at each of these levels and how they feed into one another. The similarities between the frameworks proposed by Bronfenbrenner and Lederach make it easy for developmental psychologists who work with youth in contexts of political violence to locate their work within the broader peacebuilding efforts taking place in society. Both would urge psychologists to address the "issue" of youth wellbeing by increasing attention to the relationships, institutions, and sociopolitical contexts surrounding them.

Lederach's model diverges from Bronfenbrenner's with his addition of a horizontally nested timeframe to help scholar-practitioners consider the different phases of conflict intervention, ranging from immediate response

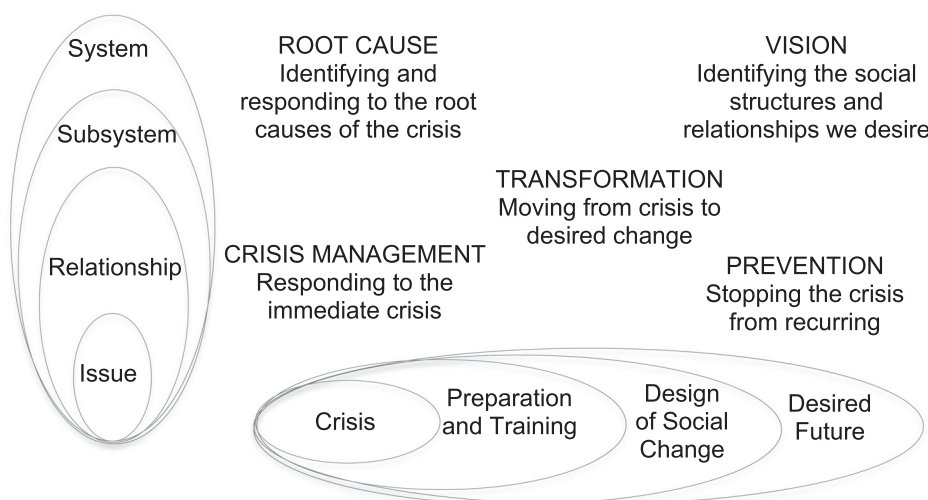


FIGURE 2.—Integrated framework for peacebuilding (Lederach, 1997). Similar to Bronfenbrenner, this framework includes a series of nested systems outlining the different levels at which conflict can manifest, from the individual issue to the broader system. It also includes a series of nested time phases for planning and developing initiatives to address conflict, from the immediate crisis to the desired future.

(crisis intervention) to generational change (desired future). Combining these two axes points to particular areas where research and programming are necessary. If developmental psychologists are focused only on events and relationships in the microsystem, then their response to youth is limited to the management and prevention of crises. Incorporating the outer systems allows psychologists to play a role in identifying root causes of violence, envisioning desired relationships and social structures, and building mechanisms that allow deeper transformation to occur over time. As developmentalists are particularly well-trained to think in long timelines, they have a lot to contribute to these broader goals. Applying bioecological concepts to contexts of political violence encourages developmental researchers to avoid focusing too narrowly on the effects of overt violence on individuals and bring more attention to the roots of violence, the conditions that prevent individuals from flourishing, and ways to transform those conditions. This will require more emphasis on the ways in which structural and cultural violence can impact development (Galtung, 1969, 1990) while also promoting a deeper understanding of resilience processes so that individuals and groups may thrive in the midst of chronic violence (Adams, 2017; Cicchetti & Valentino, 2006; Masten & Narayan, 2012).

Psychological researchers have conducted hundreds of studies on youth development in regions heavily affected by political violence and armed conflict, though they have only recently begun to employ the social ecological model in a way that incorporates the influences of person, process, context,

and time. The complexity of this model necessitates programmatic research that builds from a baseline understanding of individual functioning toward a systemic approach that can serve as the basis for more effective prevention and intervention programs.

In a recently published review, Cummings, Merrilees, Taylor, and Mondri (2017b) conceptualized a four-tiered pyramid outlining the stages of published research necessary for creating and building upon this foundation of knowledge. The majority of research on political violence and psychological functioning has tended to focus on the first tier, applying cross-sectional designs to document the psychological effects of exposure to political violence. The bulk of these studies look at the association between experiences of violence and post-traumatic stress disorder (PTSD) in a variety of armed conflicts around the world (e.g., Allwood, Bell-Dolan, & Husain, 2002; Dyregrov, Gupta, Gjestad, & Mukanoheli, 2000; Lavi & Solomon, 2005; Smith, Perrin, Yule, Hacam, & Stuvland, 2002). Others have also documented rates of depression (Brajša-Žganec, 2005; Giacaman, Shannon, Saab, Arya, & Boyce, 2007; Klasen et al., 2010; Kohrt et al., 2008; Thabet et al., 2004) or a combination of internalizing, externalizing, and somatic problems (Abdeen, Qasrawi, Nabil, & Shaheen, 2008; Goldstein, Wampler, & Wise, 1997; Llabre & Hadi, 2009; McAloney, McCrystal, Percy, & McCartan, 2009; Okello, Onen, & Musisi, 2007; Paardekooper, De Jong, & Hermanns, 1999; Vizek-Vidović, Kuterovac-Jagodić, & Arambašić, 2000). Although these studies provide useful information on psychopathology in many diverse contexts, the rates, severity, and duration of psychological symptoms that they report vary with each study (Cummings et al., 2017b). These findings are inconsistent due in part to the overreliance on cross-sectional designs and narrow emphasis on psychopathological outcomes. Despite the mountain of studies produced at this tier, the lack of attention to causal processes makes it difficult to draw any meaningful conclusions about youth development in contexts of violence or to develop effective intervention programs.

In an attempt to improve upon first-tier research designs, Dawes and Cairns (1998) insisted that psychologists have counted enough symptoms and now need to focus on investigating why, how, for whom, and in what circumstances these symptoms develop. In line with this call, the second tier begins to incorporate the social-ecological model by exploring risk and protective factors in the family, school, community, and cultural contexts. For example, these studies have investigated the mediating and moderating impact of the caregivers' mental health (Feldman, Vengrover, Eidelman-Rothman, & Zagoory-Sharon, 2013; Panter-Brick, Eggerman, Gonzalez, & Safdar, 2009), family dynamics (Betancourt et al., 2012; Kohrt et al., 2010); neighborhood characteristics (Barber, 2001); peer and sibling relations (Peltonen, Qouta, El Sarraj, & Punamäki, 2010); and social supports (Betancourt et al., 2010; Duraković-Belko, Kulenović, & Dapić, 2003; Llabre & Hadi, 1997). They have also explored a wider range of individual characteristics outside the realm of psychopathology, such as social

functioning (Al-Krenawi, Graham, & Kanat-Maymon, 2009; Lavi & Slone, 2011); perception of threat (Slone, Lobel, & Gilat, 1999), religious orientation (Khamis, 2012; Laufer & Solomon, 2011), traumatic experiences unrelated to war (Laor, Wolmer, & Cohen, 2001); academic performance (Jones & Kafetsios, 2005); and prosocial behavior (Keresteš, 2006).

This collection of research paints a clearer picture of development in these contexts by focusing more heavily on proximal processes. The examination of mediating and moderating variables in multiple social-ecological settings begins to highlight the specific factors that influence an individual's probability of experiencing resilient or undesirable outcomes. Even so, the continued reliance on cross-sectional designs limits the reliability of these results. The third tier also includes programmatic research on a wide array of process-oriented and social-ecological factors but moves it a step further by providing longitudinal evidence for these dynamic processes (Cummings et al., 2017b). Third-tier studies include multiple time points (at least three) and process-oriented variables in order to understand the relation between violence exposure and changes to behavior over time. For example, a three-wave study with children from Burundi showed that higher levels of perceived social capital were linked to declining levels of mental dysfunction, increased social support over time, and lower overall rates of depression (Hall, Tol, Jordans, Bass, & de Jong, 2014). Longitudinal designs can be employed to explore questions related to the cumulative impact of violence, the continuation or growth of mental health problems over time, and the curvature of these changes. Further, by identifying how specific risk or protective factors can influence change over time, these designs can have important implications for testing and implementing empirically grounded intervention programs (tier four). Still, even as more psychologists begin to employ longitudinal designs, one area in the field that is still left untapped is the exploration of process-oriented factors outside the individual's immediate setting and their potential impact on development over time.

III. Beyond the Microsystem

With the increased emphasis on systemic, social-ecological research in contexts of violence, many psychologists are broadening their scope to understand the real-life settings in which people live out their lives. Although the bioecological model was developed as a caution against overvaluing contextual influences at the expense of proximal process and individual agency, dynamics emerging in the outer systems remain important and merit the same amount of conceptual clarity and empirical inquiry. For instance, any number of *exosystem* factors, including the behavior of a wide array of social and civic actors as well as the activities surrounding public institutions and services can interface with individual development. Referred to by Ritzer (1981) as the “macro-objective” level of society, this system subsumes a host of concrete elements that trickle down to the microsystem via law, policy, bureaucracy, technology, business, and city planning—as well as the groups of individuals tasked with running these organizations. An individual’s direct or indirect access to power settings can be of particular importance as it influences their ability to advocate on their own behalf and influence the allocation of resources (Bronfenbrenner, 1979). Youth researchers have incorporated measures at the exosystem level by analyzing the developmental implications of policies restricting travel for medical care (McNeely, Barber, Giacaman, Belli, & Daher, 2018), sectarian crime statistics from local police reports (Cummings et al., 2013a), and child rights legislation (Bolten, 2018; Wessells et al., 2015).

As noted above, features of the *macrosystem* tend to be more abstract than the others, as it does not refer to a concrete setting or interaction but to the overarching societal patterns and prototypes that inform structures and activities within each of the inner systems. Macro-level factors comprise the broadly shared norms, values, ideologies, and traditions that inform behavior and tend to be relatively homogenous within a particular group or society. These factors serve as the “carriers of information and ideology that, both explicitly and implicitly, endow meaning and motivation to particular agencies, social networks, roles, activities, and their interrelations” (Bronfenbrenner, 1977, p. 515). Thus, many characteristics of process, person, and context often depend on the macrosystem in which they occur. Though it is sometimes equated with the status quo or social culture (see Causadias, 2013), this does not imply that macro-factors are static. Like everything else in the social ecology, they change and fluctuate over time—sometimes with rapid oscillation and sometimes through lengthy processes of social change, depending on the variable of interest. For this

reason, understanding how individuals and communities interrelate with key macro-level factors (e.g., ideology, narratives, collective emotions, norms) is of vital concern for contexts of political violence and armed conflict, as gradual changes to these patterns of thinking are necessary for sustainable conflict transformation and reconciliation (Lederach, 1997). Psychological research has frequently focused on the way societal values and ideological expectations are transmitted through group narratives, as well as the ways in which these narratives have been utilized to cope with fear, heal from trauma, justify violence, and construct identities (Bar-Tal, Oren, & Nets-Zehngut, 2014; Hammack, 2011; Hirsch, 2008; McAdams, 2001; Murphy, 2012; Senehi & Byrne, 2006; Shirazi, 2012).

The *chronosystem* also serves as a fertile ground for exploration by accounting for changes to the social environment over time as well as changes to the individual. The exploration of cohort effects or generational differences sheds light on the historical events and trends that differentially influence a person's experiences, interpretations, and trajectories (Elder & Rockwell, 1979). It situates individuals within a larger context of historical patterns and allows researchers to disentangle the impact of war across multiple generations. For example, some researchers have written about the chronosystem effects on youth in post-war Lebanon. Although their parents' generation had been shaped by personal experiences of the civil war, many post-war youth found themselves struggling to break free from the memories of their parents and establish their own identities (Larkin, 2010). The narratives of these youth evolved alongside post-war events, as they transitioned from idealism to activism to complete disillusionment (Khalaf, 2014). A similar example can be evidenced in the cohort effects exhibited by Palestinian youth during the uprisings of the past three decades. Research has delineated the ways in which the first *intifada* elevated youth as an empowered symbol of resistance, the second *intifada* found them withdrawing from the conflict or complying with militant political groups, and the more recent uprisings were led by youth who have been shaped by a deep distrust of political leaders (Peteet, 1994; Rosen, 2005; Rudoren, 2015; White, 2015). With regard to quantitative research, the combination of event history calendars and latent profile analysis has also been employed among Palestinians in order to identify patterns of behavioral response to political violence across a period of 25 years (Barber et al., 2016).

Even in his later work, Bronfenbrenner (1999; Bronfenbrenner & Evans, 2000) reiterated the importance of accounting for exo-, macro-, and chronosystem forces by noting that stressful conditions originating in domains outside the family, such as "the world of work, the neighborhood, or the society at large" (p. 23) could significantly undermine the power of proximal processes to enhance psychological development. For instance, some have theorized that an imbalance in the distribution of resources or a lack of access to social, economic, and political capital can lead to powerful feelings of discontent and injustice among individuals (Barber, 2014; Gurr, 1970).

Others have suggested that high levels of sociopolitical conflict—even when it is not directly experienced—can exacerbate the psychological problems they are already experiencing (Boxer et al., 2013). Specific characteristics of a conflict, such as its perceived motivation (e.g., geopolitical, ideological), severity (e.g., casualties, tactics), and duration (protracted nature, historical roots) can drastically alter the way individuals respond to it (Barber, 2008). Additionally, violence can become chronic as it is persistently reproduced by complex macro-structural factors such as poverty, racism, legacies of colonialism or exclusion, displacement, organized crime, weak or corrupt governance, urbanization, climate change, mass media, and destructive economic policies (Adams, 2017). The heavy influences that these factors wield can often weaken the efficacy of peacebuilding and psychosocial intervention programs. Though developmental psychologists may not be able to alter the macro-context itself, understanding how dynamics at the macro-level interrelate with those at the micro-level may help them identify and strengthen protective factors for individuals.

IV. Emotional Security and the Political Climate

The current study explores the micro-macro connection by examining whether a political climate characterized by high intergroup tension or in-group threat alters how adolescents respond to sectarian violence in the community. As shown through the tier-one studies above, there is no shortage of evidence documenting the detrimental impact that political violence can have on youth. Many of these studies have shown that direct exposure to violence in the community increases the likelihood of adjustment problems (Ajdukovic & Biruski, 2008; Barber, 2008; Dubow et al., 2010; Smith et al., 2002). Psychologists have further refined the influence of community violence by distinguishing between sectarian and nonsectarian threats in the community. Nonsectarian violence refers to “ordinary” crime and disorder, while sectarian violence is motivated by intergroup aggression or the broader ethno-political conflict (Goeke-Morey et al., 2009; Taylor et al., 2011). Research indicates that sectarian and nonsectarian threats impact youth in different ways, with sectarian violence often serving as a particularly salient stressor, because it targets one’s social, ethnic, or narrative identities (Cummings et al., 2013a; Hammack, 2011; Klandermans, 2013; McAloney et al., 2009; Muldoon, 2013). Because sectarian violence interrelates so closely with one’s identity, increased exposure to it may also enhance youth’s engagement and participation in the conflict by altering the meaning they derive from group belonging (Barber, 2014). In addition, sectarian violence and perceptions of threat have also been found to heighten adolescents’ *emotional insecurity*—a construct closely connected to emotion regulation and adjustment (Bar-Tal & Jacobson, 1998; Batniji et al., 2009; Cummings & Miller-Graff, 2015; McAloney et al., 2009).

Research in developmental psychology has consistently demonstrated the centrality of emotion regulation capacities to an individual’s developmental outcomes, with differences in these processes predicting multiple aspects of socioemotional functioning and maladjustment (Eisenberg, Spinrad, & Eggum, 2010). Within the family context, emotion regulation processes have been identified as an important link between secure attachment relationships (i.e., between a caregiver and child) and healthy functioning (Cassidy, 1994). These attachment relationships facilitate the development of internal working models that guide the child’s social, emotional, cognitive, and physiological development throughout their lives. When a child grows up feeling safe and secure with the caregiver, it allows for optimal levels of development across all of these domains (Bretherton & Munholland, 2008). Emotional Security Theory (EST) emerged as an expansion of attachment

theory, positing that these regulatory processes are influenced by the entire family system as opposed to simply the caregiver–child relationship (Cummings & Davies, 1996). High levels of marital conflict, for instance, have been found to impact regulatory processes both directly and indirectly by shifting the dynamics of parenting and family interactions (Cummings & Davies, 2011).

More recently, it has been suggested that a child's emotional security—and thus their psychological and physiological functioning—is impacted not only by the family setting but also by the community setting (Cummings & Miller-Graff, 2015; Lovell & Cummings, 2001). When individuals feel that their safety is threatened, the regulatory processes that influence physiological arousal, subjective emotions, cognitive patterns, and behavioral reactions can become activated, which may further impact family-wide relationships and ongoing development (Cummings & Davies, 1996; Cummings et al., 2016b). A series of studies in Northern Ireland have indicated that emotional insecurity explains the adverse impact of violence exposure on youth adjustment—often resulting in higher levels of internalizing and externalizing behaviors (Cummings et al., 2010a, 2010b, 2012). Feeling insecure about the community was also found to sensitize these youth to family conflict at home, further demonstrating how insecurity in different contexts can have an additive impact on the regulatory systems (Cummings et al., 2016b). In Croatia, research has shown that youth exhibited two distinct expressions of emotional insecurity in response to either generalized antisocial behavior or ethnic tension in the community (Taylor, Merrilees, Corkalo Biruski, Ajdukovic, & Cummings, 2017).

Although the impact of sectarian violence on emotional insecurity and subsequent adjustment is well established, there has not been ample research on the variety of factors giving rise to emotional insecurity—particularly outside of the family setting. The studies described above assess the extent to which the adolescent's direct exposure to sectarian violence can heighten their insecurity. Few have tested the effects of *indirect* exposure to sectarian violence—such as a tense political climate or persistent discourse perceived to be threatening to one's community. Prior research suggests that these factors could indeed have an adverse impact on emotional security. For instance, a meta-analysis conducted by Pascoe and Richman (2009) indicates that individuals' perception of discrimination and threat can lead to negative mental and physical health outcomes, both by heightening the stress response and by causing the individual to engage in unhealthy behaviors. Research with Israeli children suggests that psychopolitical factors (i.e., “psychologically impacting processes rooted in the political sphere”) may contribute to the level of distress in children (Slone et al., 1999, p. 80). Not only does distress occur in *response* to salient political events and perceptions of threat, but stress arousal can also occur if there are cues signaling that a harmful event may occur in the future. The extent of mental health problems, however, may depend on whether the perceived threat is recent or

chronic, and if it has originated from an ingroup or outgroup source (Greenaway & Cruwys, 2018; Pascoe & Richman, 2009). Despite the evidence to suggest that psychopolitical factors originating from the macro-level may impinge on youth wellbeing, the question of how to measure them has remained a challenge.

V. Measurement Issues

Considering the breadth of Ecological Systems Theory and the complex transactions occurring within and across systems, the methods used for testing these relations must account for their nonlinear, multivariate, and multilevel effects. According to developmental systems theory, a dynamic system is “one wherein any component of the system affects and is affected by all the other components within the system with which it is embedded” (Lerner et al., 2008, p. 188). Everything in the social ecology is constantly changing, which reinforces the need to focus not just on the person and the context but also on the reciprocal relations between these two dynamically interacting elements. To do this effectively, Lerner and his colleagues (2008) recommend that researchers focus on the relations between at least two levels of the social ecology in order to make probabilistic statements about the change trajectories of a given process. Although developmental psychologists are well practiced in assessing influences at the micro- and intraindividual levels, methods for assessing influences at higher levels are less frequently utilized. As noted by Cicchetti and Aber (1998), one reason for this is that exploring this area requires some level of “cross-fertilization with the disciplines that study ‘macro’ phenomena: anthropology, sociology, demography, epidemiology, and economics” (p. 138)—which is often outside the wheelhouse of psychological training.

Drawing from anthropological and sociological traditions, some psychologists have opted for qualitative approaches to studying individuals’ relations with their context—particularly ethnographic methods such as contextual immersion, participant observation, and open-ended interviews (e.g., Mistry & Dutta, 2015; Sparrman, 2005; Weis & Fine, 2012; Weisner, 1997; Wessells et al., 2015). These methods can be mobilized to highlight relations between the everyday lives of individuals and the macro-level changes in social policy, power dynamics, globalization, political formation, and cultural transformation (Weis & Fine, 2012). For instance, Wessells et al. (2015) used “rapid ethnography” to assess the relations between children in post-war Sierra Leone and macro-level changes regarding attitudes toward child rights and protection. Their findings revealed some of the reasons why federal laws intended to enhance children’s rights and wellbeing turned out to be ineffective or harmful. As useful as ethnography can be for observing cultural phenomena and meaning making, its emphasis on extended, immersive observations and interviewing makes it more suitable for focused, cross-sectional studies of small communities than a wide-ranging assessment of shifting trends across large populations. For developmental psychologists

interested in understanding how large-scale patterns can impact individual functioning over time, the use of quantitative methods among greater sample sizes may be preferable.

Interdisciplinary researchers often rely on survey methods to collect widespread information on public opinion and political perception (e.g., World Values Survey, Latin American Public Opinion Project). The use of large-scale surveys to gauge individual attitudes and aggregate them on a regional or national level can provide a broad sense of cultural norms and perceptions (Christ et al., 2014). Although this method can effectively measure one's interpretation and response to various aspects of the conflict, population-wide longitudinal surveys and opinion polls can be expensive (Lynch & Cicchetti, 1998), and many conflict settings lack the resources to conduct polling of this magnitude. In addition, major surveys tend to collect data on a yearly basis, making it difficult to assess changes occurring within each year. Perhaps most importantly, though there is value in aggregating individual self-report measures about the political macrosystem, it is important to note that aggregating individual assessments is *not* the same as a macro-level assessment. It is a common sociological understanding that higher levels of analysis—such as the political macrosystem—cannot be reduced to an aggregation of individuals. The social collective has its own unique character and cannot be understood through individual surveys alone (Ritzer & Stepnisky, 2014). A measure that can assess macro-level factors directly rather than the individual's interpretation of them holds more validity.

A method common to research in the social sciences—particularly in political science—is the collection of system-level macro data. These data sets are often updated yearly, providing time-series information on the properties of institutions and political systems. Some macro-level statistics (e.g., on crime, demographics, unemployment) can be disaggregated to the individual-level of analysis, but system-level data originates directly from indicators of these higher-level units and cannot be reduced to individuals (NSD, 2017). For instance, researchers affiliated with the CIRI Human Rights Project use reports from Amnesty International and the U.S. State Department to establish codes for each country that reflect the government's human rights practices (Cingranelli & Richards, 1999). Those at Freedom House develop country-level codes on political rights and civil liberties through the analysis of news reports, academic research, think tanks, and interviews with professional contacts (Becker, 2003). There have been a number of system-level data sets developed for the specific purpose of studying political violence and armed conflict, which can be useful for tracking changes in direct violence across time and between nations. In some cases, these data sets may also be used to assess relations between macro-level violence and individual functioning; however, there are some constraints that limit their applicability.

Most of the system-level data sets currently available use the nation-state as their unit of analysis, which makes it impossible to study conflicts at a

subnational or regional level (e.g., Basque Country, African Great Lakes) or in cases of contested land (e.g., Palestinian Territories). In addition, many of these data sets operationalize conflict in terms of the annual number of “battle-related deaths” (e.g., Correlates of War, PRIO/UCDP) or acts of terrorism (e.g., Political Terror Scale). This may be effective for the study of high-intensity conflicts, but it is less helpful for researchers interested in ongoing processes of conflict transformation after a peace agreement has been signed. Further, nearly all of these data sets measure conflict in terms of overt violence without accounting for either progress or nonviolent indicators (e.g., legislation, policy changes, structural reforms, community initiatives). Even the U.K. *Peace Index* measures change using indicators of homicide, violent crime, weapons crime, public disorder, and the number of police officers. Thus, while these data sets offer rich, time-series data that may provide cross-national comparisons of macrosystem factors, they face limitations when trying to apply them to psychological research related to post-accord peacebuilding, particularly in a contested, subnational region such as Northern Ireland.

Beyond the methods discussed above, scholars across disciplines have also used news reports to analyze different aspects of society. Newspapers can be especially useful for analyzing political violence, because they provide detailed information about what happened and who was involved in events as they unfolded (Möller, 2011). Although many journalists tend to over-report violent events at the expense of progress taking place in society (Barranco & Wisler, 1999), their coverage often expands beyond violent events to include many of the details surrounding political debates and disagreements on legislation, important addresses given by world leaders, major steps in the peace process, social movement activity, and any other number of newsworthy incidents. Further, depending on the scope of the newspaper, reports are not restricted to events and dynamics at the national level but can provide information on any region of interest, from the most global to the most local.

News agencies do not present an unbiased view of events but—through a combination of political leanings, censorship, and market-driven decisions—present information through a particular lens (Möller, 2011; Myers & Caniglia, 2004). Descriptions of a given event that are presented by journalists as incontestable facts may in actuality be heavily shaped by the journalists’ perspectives and the goals of the news agencies employing them (Costigliola, 2004). Reporting on an event requires journalists to make specific choices about the language they use, the perspectives they highlight, and the facts they choose to emphasize or omit. For this reason, it is necessary to position newspapers in history “as active producers of meaning, rather than assuming they merely ‘reflect’ or ‘reproduce’ some preexisting social reality” (McAlister, 2001, p. 5). In this way, journalism shapes political reality not only by presenting information about an issue but also by indicating how much importance people should attach to it (McCombs & Shaw, 1972).

Nonetheless, by both reflecting *and* creating the discourse surrounding intergroup conflict and peace processes and projecting it throughout society,

newspapers can have a direct impact on the way people observe, interpret, and respond to the world around them (Bandura & Walters, 1963; Costigliola, 2004; Gitlin, 1979). The form and content of news, when aggregated over time, can shape and inform individual responses to the conflict. As a result, local news sources can be a useful resource for assessing the overarching political climate surrounding a conflict (Myers & Caniglia, 2004; Townsend et al., 2016). Many studies have used coded news reports to research sociopolitical phenomena (e.g., Barclay & Liu, 2003; Coleman & Wasike, 2004; Heber, 2011; Kim, Kumanyika, Shive, Igweatu, & Kim, 2010; Miller, Peake, & Boulton, 2010; Perkins & Taylor, 1996; Trenz, 2004), but few have tested the psychological impact of these sociopolitical events. The present study developmentally assesses the political macrosystem over time by using coded news data to examine the political climate in Northern Ireland, how it fluctuated over a period of 5 years, and how adolescents' response to sectarian community violence varied based on these changes. Whereas many efforts to assess the macrosystem rely on surveying individuals about sociopolitical events, newspaper coding shows particular promise because it allows for a direct assessment of the political macrosystem specific to Northern Ireland as well as its relation to psychological development.

VI. Post-Accord Northern Ireland

As a setting of protracted intergroup conflict with historical roots that date back centuries, Northern Ireland is one context in which the relation between the political climate and individual trajectories may be particularly salient. There are a number of alternative names for the general region of Northern Ireland, many of which have sectarian undertones. “Ulster” has been used by Protestant unionists in the region, “the North of Ireland” has been used by Catholic-nationalists, and “The Six Counties” has been used by Catholic-republicans. The term “Northern Ireland” is used in this study, because it is the official, legal name of the region and the one used by both the British and Irish governments (Northern Ireland Office, 1998).

The origins of the Northern Ireland conflict date back to the 12th century when all of Ireland fell under English control and became a colony of the United Kingdom. This marked the beginning of over 700 years of direct English (and later British) involvement in Irish affairs. The colonial history and asymmetric power dynamics that continued to develop set the stage for Irish resistance toward English interference and perceived attitudes of superiority (McCartney, 1999). Following a series of nationalist uprisings in the 20th century, the Anglo-Irish Treaty of 1921 granted Ireland its independence. As part of this treaty, the island was partitioned. The larger Catholic Irish segment seceded and formed a free state now known as the Republic of Ireland, and the smaller, Protestant-majority segment (Northern Ireland) remained a part of the United Kingdom (McKittrick & McVea, 2002).

During this time, most of Northern Ireland’s leadership consisted of Protestants. Its first Prime Minister went so far as to call it “a Protestant Parliament and a Protestant State” (Buckland, 1981). As a result, the Catholic community that remained in Northern Ireland increasingly abstained from participating in the government and began to experience marginalization and systematic discrimination (McKittrick & McVea, 2002). Over time, the two communities developed a sense of identity in opposition to the other and a resistance to cultural integration (Shirlow & Murtagh, 2006). Families and neighborhoods became split along distinct political-religious lines with Catholic nationalists desiring reunification with Ireland, and Protestant unionists maintaining their loyalty to Great Britain (Darby, 1983). A double minority status further entrenched these divisions, as Catholics felt marginalized in Northern Ireland and Protestants felt outnumbered on the island as a whole (McCartney, 1999).

The long legacy of British colonialism in Ireland and the ensuing divisions between Catholics and Protestants in Northern Ireland set the stage for

a 30-year period of heightened violence known as The Troubles. Riots and organized protests started to break out amid these intergroup divisions and ongoing patterns of exclusion. In 1968, violence erupted in the form of armed conflict between civilians, paramilitary groups, and state forces. Over the course of the conflict, an estimated 3,600 people were killed, roughly 50,000 people injured, and around 20,000–30,000 imprisoned (Cairns & Darby, 1998; Cairns, Kenworthy, Campbell, & Hewstone, 2006; McEvoy & Shirlow, 2009). It is important to note that although these groups are labeled as Catholics and Protestants, these labels are typically used to indicate ethnopolitical identities rather than adherence to a set of religious beliefs or practices, and the members of these groups tend to identify as Irish and British, respectively (Mac Ginty, Muldoon, & Ferguson, 2007). While many use the terms Catholic and Protestant to reference the two communities, others use the political ideologies to which they ascribe (i.e., nationalist or republican for Catholics and unionist or loyalist for Protestants depending on their specific political positions).

This period of violence officially ended in 1998 with the signing of the Belfast “Good Friday” Agreement, which established a devolved legislature with cross-community operations and a power-sharing executive; created north-south institutions between Northern Ireland and the Republic of Ireland; and set up east-west institutions between Northern Ireland and the United Kingdom. The agreement also called for reforms in security, policing, and justice, as well as the decommissioning of paramilitary groups and the partial release of political prisoners (Northern Ireland Office, 1998). Despite the relative success of these structural changes, sectarian violence has continued throughout the post-accord period—particularly within socially deprived neighborhoods in Belfast (Northern Ireland Statistics, 2017). Signing the peace agreement decreased the severity of violence and made the conflict more manageable, but—as is typically the case in regions characterized by intergroup conflict—many of the underlying rifts between Catholic and Protestant communities persist (Mac Ginty, 2006). For instance, the major paramilitary organizations that operated at the height of the Troubles have largely disbanded, but dissident opposition, paramilitary splinter groups, sectarian-motivated crime, and rioting have continued (Höglund & Zartman, 2006; Horgan & Morrison, 2011; Power, 2011; Topping & Byrne, 2012). The majority of schools and many neighborhoods continue to be segregated along Catholic–Protestant lines (Hughes, Campbell, Hewstone, & Cairns, 2007), and as a result, marital, professional, and social relationships tend to remain within communities rather than cutting across ethnic groups (White, 2011). Symbolic markers such as flags, political murals, and “peace walls” continue to mark the more divisive neighborhoods, while the annual ingroup parades that take place every summer are regularly accompanied by an increase in sectarian quarreling and violence (Shirlow & Murtagh, 2006). Some have suggested that the persistence of such a tense political atmosphere has added to public discontent, distorted perceptions of the other

group's intentions, and led to the domination of extremist political parties over moderate parties (Mac Ginty & du Toit, 2007; Sisk, 2006).

The peace agreement was an important step in equalizing group status between the Catholic and Protestant communities, but divisions between these groups have endured through all the of the micro and macro social changes and been strengthened through political rhetoric (Mac Ginty & du Toit, 2007; Muldoon, Trew, Todd, Rougier, & McLaughlin, 2007; Stevenson, Condor, & Abell, 2007). This is especially evident through the lives of youth in Belfast, who are more likely to experience sectarian violence than adults (Jarman, 2005). One report shows that over three-quarters of adolescents in Belfast had experienced sectarian crime or violence in their communities, making it difficult for them to break free from the social and psychological narrative of the Troubles (McAloney et al., 2009). Youth from underserved communities and those with unstable family backgrounds have the highest risk of exposure (Byrne, Conway, & Ostermeyer, 2005; Cummings et al., 2012; Muldoon & Trew, 2000). Life in these communities often implies low levels of education, high levels of poverty, substance abuse, and a "sustained 'ghettoization,' social, and material deprivation" (Browne & Dwyer, 2014, p. 800) that restricts their access to opportunities and advancement.

Despite the fact that these children and adolescents were born after the peace agreement, evidence has shown that youth are frequently at the forefront of sectarian rioting and crime (Haydon & Scraton, 2008; Shirlow & McEvoy, 2008). Research has indicated that youth engagement in antisocial behavior—both sectarian and nonsectarian—is prevalent (Byrne et al., 2005; Dwyer et al., 2013). The more common activities include sectarian rioting, property damage, throwing objects at people, lighting fires in public places, and substance abuse, though others engaged in burglary, physical assault, attacking school buses, and drug-dealing. Youth have given a variety of reasons for their engagement in sectarian rioting. One study participant said, "It was a distraction from boredom in the community, because you'd go down to the interface and that was giving you something to do for a few nights," and another said, "Windows will get put in, and then we will get blamed for starting it but also get blamed by our own community for allowing the windows to be put in" (Dwyer et al., 2013, p. 42). Other scholars have noted that *indirect* exposure to sectarian violence is also common for Northern Irish youth. This typically occurs from listening to others talk about the violence and their experiences of trauma, displacement, and the loss of family members (Ladd & Cairns, 1996, p. 15; McGrellis, 2005). In light of the pervasiveness of these experiences and the compound risks faced by youth in socially deprived communities, it is useful to examine the added impact of prolonged exposure to a tense and divisive political climate.

VII. History of the Project

The foundations for this research project originated in 1996 when Mark Cummings began as a Fellow in the Kroc Institute of International Peace Studies at the University of Notre Dame. Complementing the interdisciplinary perspectives promoted by the Kroc Institute, Cummings contended that sustainable peace processes would not only benefit from understanding agreements among political leaders, but also by understanding the role of children and families. Disentangling the effects of political violence on youth and families over time can help identify areas where additional program and policy support is needed. First steps to launch the project began in 2000 as Cummings connected with Ed Cairns, a leading psychologist from Northern Ireland who had written extensively about the impact of conflict on children (Cairns, 1987, 1996). A preliminary study by Cummings and his student Erin Lovell explored the impact of the Troubles on children's wellbeing and adjustment, with emotional insecurity (Cummings & Davies, 1996) and social identity (Cairns & Mercer, 1984) hypothesized as mediating processes.

Over the next few years, Cummings and Cairns submitted a successful grant proposal to the National Institutes of Health (R01 HD046933) in response to a request for application on themes related to violence and children. By this time, Peter Shirlow, Marcie Goeke-Morey, Christine Merrilees, Andrea Furey, and Alice Schermerhorn had joined the team. As planned, this newly funded project aimed to investigate the effects of political violence on children by looking specifically at the mediating role of emotional insecurity and social attitudes. The international research team used mixed methods to develop measures of emotional insecurity and both sectarian and nonsectarian community violence (Goeke-Morey et al., 2009). On this foundation, the longitudinal study began in 2006 throughout interfaced neighborhoods in Belfast (i.e., ethnically homogeneous neighborhoods that share a border). Shirlow selected the neighborhoods to maximize variation in past and current levels of political violence (see Procedures for more detail). This proved to be important, as later studies demonstrated that the rate of historical political deaths in each neighborhood predicted adolescents' present-day exposure to both sectarian and nonsectarian community violence (Cummings et al., 2010a, 2012).

While data collection continued, Laura K. Taylor joined the research team, and a successful application to NIH provided a continuation of funding from 2009 to 2014. The goal of the project remained the same but had expanded to include a total of six waves of annual data collection and a closer examination into the effects of political violence at multiple levels of

the social ecology. Northern Ireland's Office of the First Minister and Deputy First Minister (ID#2110018224) provided further support for the longitudinal project and the applied implications of the findings (Dwyer et al., 2013). Dana Townsend and Justin Lunningham joined the team as this portion of the research was being carried out. In all, the longitudinal study led to a number of important insights over the years related not only to community violence but also to emotional insecurity, family processes, social identity, religiosity, social coping, and prosocial behavior. This body of work is discussed below.

A review of the research on emotional insecurity has already been covered in prior sections. To summarize, adolescents' emotional insecurity was a powerful predictor of adjustment problems. Cross-sectional (Cummings et al., 2010a) and three-wave analyses (Cummings et al., 2011, 2012) showed that emotional insecurity mediated the links between sectarian violence exposure and internalizing and externalizing behavior. Further analyses revealed that emotional insecurity also mediated the *within-person* relation between sectarian violence exposure and adjustment problems (Cummings et al., 2017a), and that within-person trajectories of emotional insecurity about the community related to a risk of developing internalizing and externalizing behavior (Cummings et al., 2013b). This relation between adolescents' direct exposure to sectarian violence and increased adjustment problems was accentuated in neighborhoods with higher crime rates (Cummings et al., 2013a). In addition to putting youth at greater risk of adjustment problems, insecurity may also sensitize them to family conflict. Findings showed that adolescents' emotional insecurity about the community exacerbated the impact of family conflict on emotional insecurity about the family (Cummings et al., 2016b). Finally, investigating reciprocal relations, adjustment problems were linked with more sectarian violence exposure 1 year later for boys, and this higher exposure related to even more adjustment problems a year after that (Cummings et al., 2019).

Given that the Troubles revolve around inter-ethnic conflict, social identity constituted an important area for investigation. Ingroup social identity strengthened the link between adolescents' direct exposure to sectarian violence and hostility toward the outgroup while weakening the link between exposure and general aggressive behavior (Merrilees et al., 2013). The effects of social identity were not always harmful, however, as strong ingroup identity buffered youth against the negative impact of sectarian violence exposure on internalizing problems—particularly for Protestants (Merrilees et al., 2013). The strength of social identity can also change over time. Merrilees, Taylor, Goeke-Morey, Shirlow, and Cummings (2014) reported that social identity became stronger for adolescents' dealing with persistent emotional insecurity about the community, and Protestant youth reported stronger social identity as they got older. Catholic youth, on the other hand, showed no change over time. For Catholics, strong ingroup identity typically formed around the negative impact of the Troubles and

historical discrimination against the Catholic community. For Protestants, strong ingroup identity related to a high standard of living, job satisfaction, and political power (Goeke-Morey et al., 2014). Finally, in a study of factors related to intergroup bias between Catholic and Protestant adolescents, Merrilees et al. (2018) reported that intergroup bias increased with age and that both quality contact happening in the neighborhood and individual-level contact are linked with lower intergroup bias.

Another line of research in this project investigated the role of the family with a particular focus on religiosity, social coping, and father presence. Mothers' religiosity—referring specifically to their adherence to Christianity, church attendance, and the centrality of religion in their lives—was consistently associated with better family functioning (Goeke-Morey et al., 2013). Specifically, mothers' religiosity related to more family cohesion and behavioral control, and less family conflict, psychological distress, and adjustment problems. Religiosity also related to greater attachment security between mothers and children. These results support a distinction between religion as social identity and religiosity as a spiritual process. Interestingly, with regard to the intersection of these constructs, Catholics' social identity related to more frequent church attendance, but this was not found among Protestants (Goeke-Morey et al., 2014). Across most faith traditions, there is support for this relation between religiosity and positive parenting—including higher levels of parental warmth, involvement, communication, and authoritative parenting (Goeke-Morey & Cummings, 2017). Although exposure to sectarian violence predicted more aggression, adolescents with a cohesive family environment were comparatively less aggressive and participated less in sectarian acts (Taylor et al., 2016). Father presence in the family was linked with reduced internalizing symptoms (Luningham et al., 2020), and mothers' use of social coping helped to buffer the negative impact of community violence on their mental health (Taylor et al., 2013).

Further research from this project focused on the constructive and agentic roles that the post-accord generation can contribute toward peacebuilding (Taylor, 2020). Going beyond the reduction of adjustments problems and toward a focus on rebuilding social relations, Taylor et al. (2014) found that adolescents' exposure to ingroup community violence (i.e., nonsectarian crime) predicted later prosocial behavior toward the outgroup, with positive outgroup attitudes strengthening these relations over time. Prosocial behaviors decreased during adolescence, particularly at older ages, with direct exposure to sectarian violence accelerating this decline (Taylor et al., 2018). Yet, trajectories of prosocial behavior related positively to social and political engagement. Relatedly, Taylor et al. (2019) found that family cohesion partially mediated the effects of perceived political conflict on adolescents' civic engagement. This suggests that the family system may be a key factor in fostering prosocial behaviors and contributing to the peacebuilding process.

The adolescents' gender, while not the focal point of any studies in this project, was frequently included as a control. Gender effects have been

somewhat inconsistent, though there are some notable results. Direct exposure to sectarian violence predicted more outgroup hostility, though this link was stronger for boys than for girls (Merrilees et al., 2013). Relatedly, girls reported less participation in sectarian antisocial behavior than boys (Taylor et al., 2016) and more volunteerism (Taylor et al., 2019). The relation between direct exposure to sectarian violence and more emotional insecurity about the community was stronger for girls than boys (Cummings et al., 2017a). Lastly, although exposure to sectarian violence predicted adjustment problems for both boys and girls (Cummings et al., 2010a, 2012), the reciprocal study linking adjustment problems with more sectarian violence exposure was significant only for boys (Cummings et al., 2019). As it pertains to the current study, it is possible that the effects of intergroup tension and ingroup threat in the macrosystem may differ between girls and boys. These gender differences may serve as a compelling area for future macrosystem research. The current study does include demographic information about the participants' gender, though this variable was not explored directly. Instead, more emphasis was placed on the adolescents' ethnic background (Catholic or Protestant), as this variable relates more directly to intergroup tension and ingroup threat.

From the outset, the research team was interested in assessing multiple levels of the social ecology in Northern Ireland. Despite it being a core element of Bronfenbrenner's model (1979), direct assessments beyond the microsystem have been rare in developmental research. Within this project, exosystem measures were incorporated through the use of neighborhood crime data (Cummings et al., 2013a) and historical political violence (Cummings et al., 2010a, 2012), but an accounting of the macrosystem has not yet been done. Accordingly, the research team developed the plan to use newspaper coding as a macrosystem measure. A prior study by Townsend et al. (2016) demonstrated that political tension between groups—when measured by coded news reports—provided information about the social ecology that was missed by other measures. The current monograph builds on this methodology to assess how both political tension and ingroup threat in the macrosystem relate with the proximal processes that have already been found to increase adolescents' emotional insecurity and subsequent adjustment problems.

As noted, research has shown that adolescents' direct exposure to sectarian violence is linked with higher emotional insecurity about the community, and this insecurity has been linked with both internalizing and externalizing problems (Cummings, Goeke-Morey, Merrilees, Taylor, & Shirlow, 2014). What is less clear is whether forces emanating from outside of their immediate environment, such as a politically tense or threatening climate, exacerbate these effects. Although some have theorized that an intense sociopolitical climate may contribute to psychological distress (Bronfenbrenner & Evans, 2000; Slone et al., 1999), this study aims to empirically test that question. The specific macrosystem constructs included

in this study are *intergroup political tension* (i.e., between Catholics and Protestants) and *ingroup threat* (i.e., threat directed toward one group in particular). These two constructs were chosen because they both serve as macro-level analogs of sectarian community violence while also distinguishing between generalized intergroup tension and dynamics that target one group in particular. An intentional decision was made not to pre-define these constructs in order to allow coders to interpret them more intuitively (see the section in Chapter VIII entitled “Measures” for more information on this process).

The macro-level measure was created by systematically compiling news reports about the conflict over a period of 5 years and coding each of them according to their reflection of intergroup tension and ingroup threat. These coded newspaper data were then combined with the longitudinal survey data to test the relation between macro-level changes in the political climate, adolescents’ exposure to sectarian violence, and their emotional insecurity about the community. Specifically, multilevel modeling was used to answer the following questions: First, is the within-person relation between sectarian violence exposure and emotional insecurity stronger during periods of high intergroup political tension? Second, is this link stronger during periods of high ingroup threat? Third, do the effects of intergroup tension and ingroup threat on emotional insecurity vary with differences in adolescents’ *cumulative* exposure to sectarian violence? We hypothesized that the positive relation between direct exposure to sectarian violence and emotional insecurity would be accentuated during periods of high intergroup political tension and high ingroup threat—especially for adolescents exposed to higher than average levels of sectarian violence. These analyses were followed by a thematic analysis of the news reports in order to help contextualize the study period and identify specific themes, events, and discourse that coders judged to be tense or threatening.

VIII. Method

The prior sections have outlined the need for more research on the processes through which various levels of the social ecology interact with proximal processes to influence youth development. As reviewed earlier, Bronfenbrenner (1979, 1986) spent his career building and refining a framework that theorizes the many ways that individuals interact with their broader context and the potential for seemingly distal forces to influence behavior. Over the past decade, this framework has been increasingly applied to understand the broader social-ecological factors influencing youth development in contexts characterized by political violence and armed conflict. The complexity of these processes has pointed to the need for programmatic research that avoids focusing narrowly on negative outcomes and instead examines a wide variety of risk and protective factors across levels of the social ecology. Longitudinal studies that examine these processes are particularly promising as they can aid in assessing growth trajectories and change over time.

The broader research program leading up to the current study has investigated these longitudinal process relations within the context of postaccord Northern Ireland. Studies that have already been published in this program have helped clarify specific processes in the family microsystem that protect youth against the negative effects of conflict, pointing specifically to the role of spirituality, family cohesion, mothers' social coping, and father presence. Research from this program has also reinforced the notion that youth are not simply victims or perpetrators of violence but also have the potential to contribute positively to the peacebuilding process. This line highlights the processes involved in reducing intergroup bias and enhancing youth prosocial behavior and civic engagement. The characteristics of one's neighborhood, such as historical political violence and levels of crime, have further clarified the outcomes of youth in Belfast. Even with all of these studies, however, one question that has not yet been answered is whether the sociopolitical climate serves as an added risk factor for these adolescents.

Influences in the macrosystem such as the political climate have been understudied in developmental research, in part because the abstract nature of these constructs have made them difficult to operationalize and assess within the confines of a longitudinal study. The systematic compiling and coding of news reports has been proposed as one potential method for assessing the macrosystem, as it provides a way to capture the overarching discourse characterizing a context during a given time period. The aggregation of coded news reports can highlight those broader sociocultural

patterns and carriers of information that have been theorized to influence social change and meaning making. The metric discussed below has been developed specifically to understand the political climate surrounding intergroup relations in Northern Ireland, a setting of protracted ethnopolitical conflict. Even so, this general method of newspaper coding could be used to provide insight into any context that is strained by intergroup division or undergoing periods of dramatic social change. This process could be tailored to assess various macrosystem factors, including the overarching norms, group narratives, collective emotions, or ideologies operating during a given period.

The subsections below outline the data collection procedures and analytic plan used in this study. In order to assess processes in both the macrosystem and the microsystem, two separate data sets needed to be used. The macrosystem data set refers to the newspaper coding. The procedures for compiling news articles, coding items, and calculating inter-rater reliability are discussed below. The microsystem data set refers to the six-wave longitudinal survey data used to publish the studies outlined in the prior section. The procedures, participants, and measures related to that survey are also discussed. Following this is a detailed description of the method used for linking these two data sets and a detailing of the quantitative and qualitative analytic plans. The quantitative plan includes a detailed description of the multilevel moderation models and general equations that were used, as well as methods of centering variables and dealing with missing data. As the macrosystem encompasses complex systems of cultural meaning, assessing it with mixed methods can be especially insightful (Cicchetti & Aber, 1998). In line with this, the addition of a thematic analysis provided a deeper contextualization of the study period, events discussed in the news reports, and the ways in which coders rated them.

Procedures

Macrosystem

The macro-level political climate surrounding Catholic and Protestant relations was assessed by systematically collecting and coding news reports about the Northern Irish conflict and peace process between the years 2006 and 2011. The two Northern Irish newspapers with the highest levels of circulation were chosen for inclusion: *Belfast Telegraph* and *The Irish News*. It is important to clarify here that the newspaper data set was not created to assess how news reports and media representations impacted individuals' attitudes about the conflict. Rather, the news reports served as a proxy for measuring political violence in the macrosystem. By tracing all conflict-related events that transpired during the study and the levels of political tension and ingroup threat that they implied, we were able to obtain an

empirical assessment of the political climate. For this reason, the number of people who were actually reading and engaging with these news reports was not particularly relevant. Even so, the newspapers with the highest circulation were chosen, because these focused on the most salient events happening during the study period rather than fringe issues.

In addition to their high circulation rates, the *Belfast Telegraph* and *The Irish News* are printed in the capital city of Belfast and report on events happening across Northern Ireland. Local newspapers were chosen instead of national newspapers (e.g., *The Daily Telegraph* in the United Kingdom or *The Irish Times* in the Republic of Ireland), because prior research has shown that news organizations based in the region of conflict tend to provide more detailed coverage of local events than national or international organizations (Öberg & Sollenberg, 2011). Additionally, these two newspapers capture a wide range of discourse among both Catholic and Protestant communities. The *Belfast Telegraph* is a mainstream newspaper that has readership in both communities, while *The Irish News* has an editorial stance that focuses more heavily on issues and ideology of importance to the Catholic/nationalist community (Ferman, 2013). There is a third newspaper that focuses on issues of primary importance to the Protestant/unionist community (*News Letter*), but it was not included in the study due to its much lower circulation.

Once these newspapers were chosen, the LexisNexis academic database was used to identify all of the news articles about the Northern Ireland conflict and peace process published by these two newspapers between 2006 and 2011. This was accomplished using the following series of keywords: *sectarian*, *paramilitary*, *crime*, *violence*, *unionist*, *nationalist*, *loyalist*, *republican*, *IRA* (Irish Republican Army), *UVF* (Ulster Volunteer Force), *UDA* (Ulster Defence Association), *SDLP* (Social Democratic and Labour Party), *DUP* (Democratic Unionist Party), and *Sinn Féin*. Most of these terms refer to various Catholic and Protestant affiliations in Northern Ireland. “Unionist” and “loyalist” are political ideologies typically espoused by the Protestant community, with loyalists being the more hardline of the two. “Nationalist” and “republican” are political ideologies typically espoused by the Catholic community, with republicans being more hardline. The DUP is a unionist political party, SDLP is a nationalist political party, and Sinn Féin is a republican political party. The UVF and UDA are loyalist paramilitary organizations, and the IRA is a republican paramilitary organization.

These keywords were used to generate search results, which were then cross-examined with hard copies of the newspapers during different days of the week. This cross-examination was done to ensure that the chosen keywords did not omit any article subsets about the conflict or process. In all, the keywords identified tens of thousands of articles related to the conflict and peace process. Of these, four articles were randomly chosen for each weekday during this period—two from *Belfast Telegraph* and two from *The Irish News* ($N = 6,082$). In other words, the newspaper data set includes two articles per newspaper per weekday across a period of 6 years. The final

selection of articles was marked with identification numbers, collated, and printed.

Microsystem

The micro-level data for this study come from a six-wave longitudinal survey in Belfast, Northern Ireland on political conflict, family processes, and youth behavior (Cummings, Goeke-Morey, Schermerhorn, Merrilees, & Cairns, 2009). The six waves of data were collected between November 2006 and July 2012. The present study uses the first five of these six waves in order to correspond with the period of analysis at the macro-level. The timing of data collection at each wave is as follows: Wave 1 (November 2006–May 2007), Wave 2 (December 2007–February 2008), Wave 3 (December 2008–February 2009), Wave 4 (January 2010–May 2010), Wave 5 (March 2011–May 2011). From the outset of this project, researchers at Notre Dame partnered with local scholars at the University of Queens Belfast and Ulster University to ensure that each step of the research design and implementation (i.e., the questions asked, measures used, and neighborhoods included) were socially, politically, and culturally relevant to those living in Belfast.

All neighborhoods came from working class, socially deprived wards that were rated in the lowest quartile in terms of education, employment, health, crime, proximity to services, and the quality of the living environment (Northern Ireland Statistics, 2017). The neighborhoods were also chosen to reflect a representative sample of Catholics and Protestants, as well as variation in the levels of both historical and current sectarian violence. The goal was to select a sample of neighborhoods with a wide range of sectarian-motivated violence but similar socioeconomic backgrounds. It is unlikely that holding socioeconomic background as constant created a false equivalency between groups, as a previous study indicated that most of the economic inequality in Northern Ireland derived from inequality *within* the Catholic and Protestant communities rather than inequality between them, even when accounting for different categories of employment (Borooah, McKee, Heaton, & Collins, 1995). These findings focus only on income, and there may be other indicators of inequality and exclusion that exist between groups. Nevertheless, limiting differences in the socioeconomic makeup of neighborhoods allowed us to focus more directly on the effects of sectarian violence.

Most of the participants lived in ethnically homogenous neighborhoods (over 90% Catholic or Protestant), many of which were interfaced (i.e., sharing a border with a neighborhood populated by the other community). Although the residents of interfaced neighborhoods may live in close proximity to the other community, most of them live their lives in a way that is segregated along Catholic/Protestant lines—particularly with regard to marriage, education, and professional relationships (Hughes, et al., 2007; Shirlow & Murtagh, 2006).

Before beginning the survey, the research team reached out to community leaders from each of the selected neighborhoods and communicated

with them about the survey and its broader goals and implications. Entering these neighborhoods through individuals and organizations that are known and respected by the community members made it easier to recruit and retain participants while also enhancing the level of trust between them and the research team (Eide & Allen, 2005; Latchem-Hastings, 2019). As a Catholic university, Notre Dame's affiliation with this study could have potentially disincentivized Protestant families from participating; yet, this effect was likely balanced by the affiliations of Queen's University Belfast and Ulster University. Although both of these universities have slightly more Catholic students than Protestants, neither university identifies as Catholic or Protestant, and their acceptance and hiring rates historically favored Protestants ("Jim Allister," 2011; Phoenix, 2016). Perhaps more importantly, the involvement of Ed Cairns and Peter Shirlow—whose work is well-known and respected in Northern Ireland—helped the team build connections and establish trust within each community.

After discussing the project with community leaders, the research team sent letters to the families in each neighborhood outlining the details of the study and inviting them to participate. These families were also contacted by phone and through door-to-door visits, which is a common practice in Belfast. Between 35 and 40 families were selected within each neighborhood. Eligible families included those with a child between 8 and 17 years old. If a family had multiple children, the youngest child was invited to participate. Trained interviewers from an established social research firm conducted in-home surveys with the mothers and children. In order to maximize the rapport between interviewers and participants, the interviewers were assigned to the same or similar neighborhoods in which they live. Matching interviewers based on their ethnicity and neighborhood affiliation was key to the participants' willingness to discuss vulnerable issues related to their mental health, family dynamics, and attitudes toward the other community. All participation was voluntary, and each family provided consent or assent before beginning the survey. The mothers' questionnaire lasted roughly one hour, and the adolescents' questionnaire lasted half an hour. As compensation for their participation, families received £20 at Waves 1 and 2, £40 at Waves 3 and 4, and £50 at Waves 5 and 6. The ethics review boards at all participating universities approved the measures and research protocol.

Participants

Microsystem

The participants include working-class mothers and their adolescent children ($N = 999$ mother-child dyads; 482 boys and 517 girls). Across the course of the study, the mean ages at each wave were, respectively, 12.18 ($SD = 1.82$), 13.24 ($SD = 1.83$), 13.61 (1.99), 14.66 ($SD = 1.96$), and 15.75 ($SD = 1.97$) years. The age variable is typically calculated using each

adolescent's birthdate and interview date. As many of the interview dates for Waves 2 and 3 are missing, the ages were originally estimated using the adolescents' age at Wave 1 and increasing by 1 year with each successive wave. For this reason, the correlation tables included in the Supporting Information Appendix show a perfect correlation between the age variables at each wave (see Supporting Information Tables C1–C3). As a way to check that this method of assigning age did not affect the findings, we later correlated wave-calculated and birthdate-calculated ages for the available interview dates. The correlations were extremely high (ranging between .95 and .97), and analyses provided no evidence that the results differed according to the age values used.

Based on the mothers' self-reports, 61% of families self-identified as Protestant ($n = 610$), 38% as Catholic ($n = 379$), and 1% ($n = 10$) did not report an affiliation. This breakdown is consistent with the overall demographics of Belfast. Although it is increasingly acknowledged that the inclusion of fathers in developmental research provides an important perspective on family processes and youth adjustment (Volling et al., 2019), only mothers were selected to participate in this survey for pragmatic reasons. Many working-class families in Belfast are led by single mothers, and even when families are led by both parents, the mothers were more likely than fathers to be at home during the day when the in-home surveys took place. Including mostly mothers and only a few fathers would have complicated the data analysis and interpretation of results (Cummings et al., 2013a). Of the mothers participating in this study, 42% were married or living as married ($n = 571$), and 58% were separated, divorced, widowed, or never married ($n = 413$).

Roughly 80% of the sample was retained from one wave to the next, which is relatively high considering that this study relied on a high-risk sample surveyed over a period of 6 years. From the original sample of 695 mother–child dyads, 575 dyads returned at Wave 2 (82%), 466 dyads returned at Wave 3 (67%), 422 dyads returned at Wave 4 (61%), and 425 dyads returned at Wave 5 (61%). A series of independent t tests and χ^2 were conducted in order to assess the differences between adolescents that dropped out of the study and those that remained at each time point (Nicholson, Deboeck, & Howard, 2017). As shown in Table 1, there were no differences in Wave 1 emotional insecurity between those who remained in the study and those who dropped out at any wave. Regarding exposure to sectarian violence (SectarianV), however, adolescents who reported more exposure during Wave 1 were less likely to return at Waves 3–5. In addition, a disproportionate number of Catholics dropped out at Waves 2 and 5. According to the survey company, attrition resulted from the following: the family was unable to be reached by phone after three attempted calls (39%); they moved and did not provide an updated address (36%); they declined to participate in the study (16%); and miscellaneous reasons (9%) such as the house was blocked or vacant when the interviewers arrived, the mother passed away, or the child was in jail (Cummings et al., 2013a).

To account for the loss of participants from communities with higher levels of sectarian violence, a supplementary sample of 304 mother–child dyads was added during Wave 3. This supplementary sample included a larger proportion of families from the high-risk communities that had shown more attrition during Waves 1 and 2. This was done to ensure that all the neighborhoods would be adequately represented for the remainder of the study. For the families that were added at Wave 3, a disproportionate number of Protestants dropped out during Wave 4, but there were no significant differences in Wave 3 exposure to sectarian violence between those who remained and those who left at Waves 4 or 5 (Table 1).

TABLE 1
DIFFERENCES BETWEEN ATTRITED AND RETAINED ADOLESCENTS ACROSS ALL TIME POINTS

	W1W2 Attrition		W1W2 Retention		W1W2 <i>t</i> Test/ χ^2	
	<i>M</i>	<i>SD</i>	<i>M</i>	<i>SD</i>	Diff.	CI
SectarianV	3.20	6.26	3.01	5.66	0.20	−0.93, 1.32
Insecurity	5.58	2.73	5.96	3.38	−0.39	−1.02, 0.25
Ethnicity	0.54	0.50	0.36	0.48	$\chi^2(1) = 13.01^{***}$	$p = .000$
	W1W3 Attrition		W1W3 Retention		W1W3 <i>t</i> Test/ χ^2	
	<i>M</i>	<i>SD</i>	<i>M</i>	<i>SD</i>	Diff.	CI
SectarianV	3.67	6.78	2.73	5.18	0.94*	0.03, 1.85
Insecurity	5.76	3.16	5.96	3.33	0.26	−0.72, 0.31
Ethnicity	0.40	0.49	0.38	0.48	$\chi^2(1) = 0.11$	$p = .737$
	W1W4 Attrition		W1W4 Retention		W1W4 <i>t</i> test/ χ^2	
	<i>M</i>	<i>SD</i>	<i>M</i>	<i>SD</i>	Diff.	CI
SectarianV	3.78	7.10	2.57	4.66	1.21**	0.33, 2.08
Insecurity	5.70	3.13	6.02	3.36	−0.33	−0.83, 0.17
Ethnicity	0.36	0.48	0.40	0.49	$\chi^2(1) = 1.17$	$p = .280$
	W1W5 Attrition		W1W5 Retention		W1W5 <i>t</i> test/ χ^2	
	<i>M</i>	<i>SD</i>	<i>M</i>	<i>SD</i>	Diff.	CI
SectarianV	3.80	6.89	2.56	4.87	1.25**	0.37, 2.12
Insecurity	5.77	3.17	5.97	3.34	−0.20	−0.70, 0.30
Ethnicity	0.42	0.50	0.35	0.48	$\chi^2(1) = 7.42^{**}$	$p = .006$
	W3W4 Attrition		W3W4 Retention		W3W4 <i>t</i> test/ χ^2	
	<i>M</i>	<i>SD</i>	<i>M</i>	<i>SD</i>	Diff.	CI
SectarianV	5.20	8.59	7.03	10.08	−1.83	−4.26, 0.60

(Continued)

TABLE 1. (Continued)

	W3W4 Attrition		W3W4 Retention		W3W4 t test/ χ^2	
	M	SD	M	SD	Diff.	CI
Insecurity	5.48	2.50	5.67	3.07	-0.18	-0.90, 0.53
Ethnicity	0.19	0.39	0.44	0.50	$\chi^2(1) = 17.18^{***}$	$p = .000$
	W3W5 Attrition		W3W5 Retention		W3W5 t test/ χ^2	
	M	SD	M	SD	Diff.	CI
SectarianV	6.28	9.71	6.58	9.63	-0.30	-2.59, 1.98
Insecurity	5.67	2.71	5.56	3.06	0.10	-0.56, 0.77
Ethnicity	0.36	0.48	0.36	0.48	$\chi^2(1) = 0.003$	$p = .955$

Notes. Differences between adolescents that dropped out of the study at each time point (Attrition) versus those that remained in the study at each time point (Retention) are shown. t Tests compared the attrited adolescents' Time 1 SectarianV scores and Time 1 Insecurity scores with those of the retained adolescents. χ^2 tests assessed differences in ethnicity between the attrited and retained adolescents.

CI = confidence interval; Insecurity = emotional insecurity about the community; M = mean; SD = standard deviation; SectarianV = exposure to sectarian violence; W1W2 Attrition/Retention = adolescents who began at Wave 1 and dropped out before Wave 2 data collection/still remained at Wave 2; W1W3 Attrition/Retention = adolescents who began at Wave 1 and dropped out before Wave 3 data collection/still remained at Wave 3 (and so on for W1W4 and W1W5); W3W4 Attrition/Retention = adolescents from the supplemental sample who began at Wave 3 and dropped out before Wave 4 data collection/still remained at Wave 4; W3W5 Attrition/Retention = adolescents from the supplemental sample who began at Wave 3 and dropped out before Wave 5 data collection/still remained at Wave 5.

* $p < .05$.

** $p < .01$.

*** $p < .001$.

Measures

All the macro- and micro-level measures used in this study are summarized in Table 2 and explained below in more detail.

Macrosystem

Sixteen undergraduate students were recruited from Northern Ireland's University of Ulster Magee Campus to code the newspapers. Each article was read by two Catholic and two Protestant students and rated according to its level of intergroup tension and ingroup threat using the following three variables: (1) *the degree to which it reflects political tensions between Catholics and Protestants* (Tension), (2) *the degree to which it indicates a threat or negative and detrimental impact to Catholics, specifically* (ThreatC), and (3) *the degree to which it indicates a threat or negative and detrimental impact to Protestants, specifically* (ThreatP). Each response was rated on a 5-point Likert scale from 0 (*not at all*) to 4 (*very much*). These three questions were intentionally separated into distinct categories to acknowledge that intergroup tension and ingroup threat are not the same construct. A given article could simultaneously reflect political tension between groups *and* threat to Catholics in particular, political

TABLE 2
SUMMARY OF CONSTRUCTS AND MEASURES

Construct	Abbreviations	System	Explanation	Scale
Political Tension between Catholics and Protestants	Tension	Macrosystem	Coders rated each news article on the extent to which it reflected political tension between Catholics and Protestants	Likert scale: 0 (<i>not at all</i>) to 4 (<i>very much</i>)
Threat to Catholics	ThreatC	Macrosystem	Coders rated each news article on the extent to which it reflected threat or negative and detrimental impact to Catholics specifically	Likert scale: 0 (<i>not at all</i>) to 4 (<i>very much</i>)
Threat to Protestants	ThreatP	Macrosystem	Coders rated each news article on the extent to which it reflected threat or negative and detrimental impact to Protestants specifically	Likert scale: 0 (<i>not at all</i>) to 4 (<i>very much</i>)
Exposure to Sectarian Violence	SectarianV	Microsystem	Surveyed adolescents responded to a 12-item Sectarian Antisocial Behavior scale on their level of direct exposure to sectarian violence in the past 3 months	Likert scale: 1 (<i>not in the last three months</i>) to 5 (<i>every day</i>)
Ethnicity	Ethnicity	Microsystem	Surveyed mothers were asked if their family's background is Catholic or Protestant	Categorical: Catholic, Protestant, No response
Emotional Insecurity about the Community	Insecurity	Microsystem	Surveyed mothers responded to a 4-item Security in the Community scale on their child's level of emotionally <i>insecurity</i> about the community	Likert scale: 1 (<i>not at all like my child</i>) to 5 (<i>a whole lot like my child</i>)

tension *and* threat to Protestants in particular, or political tension *and* threat to both groups. An article could also reflect generalized political tension between groups without indicating threat toward either group. The coder pairings (i.e., the four coders assigned to each article) were alternated every 250 articles using an adapted Latin square design in order to counterbalance any systematic effects that may occur from fatigue or drift.

The coding procedure for this project relied on a method known as “naïve” or “untrained” coding. Using this system, the coders did not base their ratings on strictly defined and agreed-upon definitions of the constructs (i.e., political tension and ingroup threat), but instead applied their own intuitive judgment when interpreting each article’s content. This method of untrained coding is often used when researchers investigate individual perceptions and attitudes about a topic, because it allows the coders to account for subtle nuances of emotion and group dynamics hidden in the subtext rather than searching for pre-determined words and activities (Schulz & Waldinger, 2005). Assessing the levels of tension and threat in the media required the coders to interpret culturally and historically embedded information about the Northern Ireland context. The use of manualized coding would have inhibited their ability to do this (Waldinger, Schulz, Hauser, Allen, & Crowell, 2004). Further, the Catholic and Protestant communities may perceive the levels of tension and threat in different ways. Allowing the coders to freely apply their own judgment makes it possible to examine systematic differences between the Catholic and Protestant coders and their interpretations of the political climate. The instructions that were given to students are reproduced in Appendix A.

Due to the use of untrained coders and the potential for greater differences between the coders’ responses, calculating a reliability index (i.e., the amount of agreement between the four coders rating each article) was informative. Intra-class correlation (ICC) was determined to be the most appropriate reliability statistic for this data for three reasons. First, ICC is suitable for ordinal and interval data such as the Likert-scaled variables used in this study. Second, it can be used when more than two coders rate each target. In this case, four coders rated each article. Third, it calculates the *magnitude* of agreement between coders rather than all-or-nothing agreement (Hallgren, 2012). Of the three cases of ICC specified by Shrout and Fleiss (1979), a two-way random effects model using average measures and absolute agreement was applied. According to McGraw and Wong (1996), this model can be used when multiple targets are rated by the same set of coders (i.e., in this case, the same four coders rated a set of 250 articles before rotating). The authors also specify that a two-way random effects model is useful when the intention is not to emphasize the specific sample of coders used in the study but to generalize across a larger population of potential coders. In the current study, we were interested in obtaining a generalized rating of intergroup tension and ingroup threat rather than analyzing the specific responses of participating coders.

Within each set of 250 articles with the same coder pairings, the ICC(2,*k*) coefficients were calculated for political tension, threat to Catholics, and threat to Protestants. The “2” in ICC(2,*k*) specifies a two-random effects

model (i.e., designs in which all coders have been randomly selected from a larger population and rate each article individually), and the k indicates that the reliability index was calculated by averaging across k number of raters (Shrout & Fleiss, 1979). The coefficients from each set of 250 articles were then averaged to give a final ICC(2, k) of $\alpha = .58$ for intergroup political tension (Tension), $\alpha = .59$ for threat to Catholics (ThreatC), and $\alpha = .51$ for threat to Protestants (ThreatP). As per the guidelines developed by Cicchetti (1994), all of these variables have “fair” reliability (between .40 and .59). The average measures unit of analysis is reported, because the current study is based on the average rating across all four coders rather than ratings of a single coder (Hallgren, 2012). Prior studies using untrained/naïve coders similarly calculated inter-rater reliability by averaging across coders (Hehman, Graber, Hoffman, & Gaertner, 2012; Waldinger et al., 2004).

Microsystem

Exposure to Sectarian Violence

The 12-item Sectarian Antisocial Behavior (SAB) scale assesses the extent of adolescents’ direct exposure to and awareness of politically motivated crime in their neighborhood. A series of focus groups with mothers in Belfast revealed that individuals in these areas draw a clear distinction between sectarian and nonsectarian threats (Taylor et al., 2011). They understand when violence and crime are driven by sectarian motives, and they respond differently to it than “ordinary” crime. This study indicated that sectarian violence is often a more salient stressor due to its targeting of the individual’s identity. Though there were some existing measures of political violence exposure at the time when the survey began—for instance, the War Trauma Questionnaire (Macksoud, 1992; Smith et al., 2002) and the Political Life Events Scale (Slone et al., 1999)—the items in these measures did not fully capture the type of violence that youth in Northern Ireland were exposed to. Our research team decided to develop an ecologically valid scale with items reflecting the sectarian-motivated behavior most commonly occurring in the context of Northern Ireland. This scale was developed using a combination of focus groups with mothers in Belfast and a two-wave survey of mothers in Derry/Londonderry (Goeke-Morey et al., 2009). The focus group discussions helped distinguish between sectarian and non-sectarian community violence, identify the forms of sectarian behavior that children are most likely to be exposed to, and ensure that the language used in each item was consistent with local terminology. The two-wave survey was used to refine the scale and test its psychometric properties.

The current study uses youth reports of exposure to sectarian antisocial behavior from Waves 1–5 of the longitudinal survey. The youth were prompted with the following instructions:

Your community refers to the [insert denominational community participant identified earlier] community. And the OTHER community

refers to the [insert other] community. These next questions are about things that might happen in your community. Please report only events that actually occurred in the community, not incidents from movies or fictional television (Cummings et al., 2010b, p. 841).

Youth were asked to report how frequently in the last 3 months a series of items took place, including *stones or objects thrown over walls, name calling by people from the other community, houses or churches paint-bombed by the other community, blast bombs or petrol bombs exploded by the other community, someone chased on the street by someone from the other community, and someone beat up by someone from the other community* (for the full scale, see Cummings et al., 2010b). Each response was rated on a 5-point Likert scale from 1 = *not in the last three months* to 5 = *every day*. Cronbach's α s were excellent across all five waves ($\alpha_1 = .90$, $\alpha_2 = .95$, $\alpha_3 = .94$, $\alpha_4 = .94$, $\alpha_5 = .94$, $M = .93$, $SD = .02$).

Emotional Insecurity in the Community

The Security in the Community Scale (SICS) was also developed specifically for the context of Belfast through the same focus groups and pilot testing mentioned above (Goeke-Morey et al., 2009) and has been adapted for use in other contexts (e.g., Croatia, Palestine; Taylor et al., 2017). This scale measures the extent to which adolescents feel that they are physically and psychologically unsafe in their communities. The current study uses mothers' reports about their children's emotional insecurity during Waves 1–5. Participating mothers were asked to respond to the following four items: (1) *My child feels threatened by people approaching from the other community*; (2) *My child stays in because of threat from the other community*; (3) *My child has been unable to sleep because of violence*; (4) *My child feels something very bad is going to happen*. These responses are scaled from 1 = *not at all like my child* to 5 = *a whole lot like my child*. Cronbach's alphas were good across all five waves ($\alpha_1 = .82$, $\alpha_2 = .81$, $\alpha_3 = .80$, $\alpha_4 = .81$, $\alpha_5 = .84$, $M_\alpha = .82$, $SD_\alpha = .02$). Including adolescent reports of their emotional insecurity about the community may have provided additional information, though these data were not available for all five waves. Although there may be some uncertainty surrounding the ability of mothers to accurately perceive their children's emotional insecurity, pilot testing and subsequent factor analyses have shown that the mother reports have strong psychometric properties and were able to predict adolescents' internalizing and externalizing behavior (Cummings et al., 2011; Goeke-Morey et al., 2009).

Combining the Micro and Macro Data sets

After all micro-level and macro-level data were collected, the newspaper coding had to be matched to the survey data. The goal was to summarize the newspaper coding to reflect the average level of political tension (Tension)

and ingroup threat (ThreatC/ThreatP) occurring in society during each participant's survey session. Combining these data sets makes it possible to assess how adolescents' survey responses varied in relation to the political climate. To do this, the daily newspaper codes were averaged over the 3 months prior to each participant's survey date. For example, if a participant was interviewed on February 15, 2007, this participant was assigned the mean value of codes from November 14, 2006 to February 14, 2007. Thus, all participants interviewed on the same date were assigned the same values. Participants interviewed a few days apart typically had similar values, whereas participants interviewed months apart sometimes had very different values. See Supporting Information Appendix B for more detail on how these values fluctuated throughout each period of data collection (Supporting Information Figures B1–B3). Once the averages were calculated, each survey participant was assigned three separate means summarizing political tension, threat to Catholics, and threat to Protestants. Although the full newspaper data set contains 6,082 articles, only the articles published during the 3 months prior to each participant's survey were included. As participants were typically interviewed during the winter and spring months, many of the articles published during the summer and fall are not included in the analysis. Thus, this study summarizes political tension and ingroup threat from 2,797 news articles.

The matching process described above was used for four of the five waves of data. For Wave 3, however, the survey company did not record the interview dates for each of the participants, so the same method of matching the newspaper coding to the survey data could not be used. The survey company confirmed that data were collected between December 2008 and February 2009. During this time, there were no major peaks in political tension or ingroup threat (according to the newspaper coding), though there was a slight decrease in all three variables across the data collection period. For someone interviewed at the beginning of the range, the summary statistics would have been 1.45 (political tension), 1.09 (threat to Catholics), and .92 (threat to Protestants). For someone interviewed at the end of the range, they would have been 1.09 (political tension), .93 (threat to Catholics), and .88 (threat to Protestants). In order to ensure that none of the individuals were assigned political climate values that were too far above or too far below the actual level of tension/threat during their interviews, all individuals at Wave 3 were assigned a value summarized across the full period of data collection—beginning at 3 months prior to December and ending in late February 2009: 1.29 (political tension), 1.03 (threat to Catholics), and .91 (threat to Protestants).

Another issue during the matching process was the discovery that interview dates were not recorded for 164 of the 575 dyads in Wave 2. All of these dates were extrapolated by looking at the interview dates for other families living in the same neighborhood and those with numerically similar ID numbers—both implying temporally close interviews. For instance, all

recorded interviews in one neighborhood occurred between January 12 and January 26 during this wave. All participants from this neighborhood with missing interview dates were assigned January 12. The beginning of the range was chosen over the midpoint or the end, because all interviewees in this range regardless of their interview date would have experienced the macro-level events leading up to January 12. If they were assigned a date at the end of the range but their interview actually took place at the beginning of the range, then they would have been assessed according to macro-level events that did not yet occur.

The decision was made to summarize data across 3 months rather than across a longer period because the Sectarian Antisocial Behavior scale similarly uses 3 months as a period of reference (i.e., participants were asked how frequently in the *last three months* they were exposed to various forms of sectarian antisocial behavior). Using the same time scale for all these measures makes it easier to interpret the results. A second decision was made to summarize the newspaper codes using the mean value rather than another summary statistic such as the standard deviation. Although the standard deviation could be interesting insofar as it would show the level of instability in the political climate during these months, the mean value was judged to be preferable for two reasons. First, standard deviations across the 3-month periods were generally low, suggesting that variability may not be high enough to show an impact on emotional insecurity; and second, a high mean value suggests sustained levels of high tension/threat in society, and it seemed likely that adolescents' emotional insecurity would be more impacted by this sustained intensity than by an alternating presence and absence of tension/threat.

Data Analytic Strategy

Multilevel Growth Modeling

The present analysis examines whether the relation between adolescents' exposure to sectarian community violence and their emotional insecurity is exacerbated during periods of high political tension and ingroup threat, as indexed by newspaper reporting. To assess evidence for this hypothesized association, a series of moderation analyses was conducted using multilevel modeling in SAS PROC MIXED statistical analysis software with a robust estimator to account for variable non-normality. A multilevel modeling approach was selected because it can accommodate the kind of hierarchically structured data that is used in longitudinal, social-ecological studies such as this. Specifically, multilevel modeling shows how a given parameter can vary across more than one level of analysis (Raudenbush & Bryk, 2002; Singer & Willett, 2003). This makes it an effective tool for longitudinal research, because it can deal with dependent, repeated measures data by nesting each time point within the individual. It is similarly effective for studying the social ecology, because it separates individual and contextual effects by nesting

individuals within groups (e.g., families, neighborhoods, ethnic and religious affiliations; Curran & Bauer, 2011; Raudenbush & Sampson, 1999). In this way, multilevel modeling allows for analyses that look at interindividual differences in intraindividual change and the influence of social factors on development (Baltes & Nesselroade, 1979).

The failure to disaggregate these individual and contextual effects is known as an ecological fallacy (Schwartz, 1994). This occurs when the results of group-level data are used to make inferences about individuals. It is an issue that has long plagued the social sciences, as researchers in these fields are often concerned with exploring the influence of macro-level phenomena on individuals (Curran & Bauer, 2011). The most common forms of ecological fallacy occur when (1) variables that correlate strongly at the group level are assumed to correlate strongly at the individual level; (2) a construct that emerges at the national level is assumed to exist at the individual level; or (3) a group average is used to make assumptions about an individual within that group (Brewer & Venaik, 2014).

Social-ecological researchers need to be cautious when designing their analyses so as not to confound group- and individual-level effects. This is especially true in the current analysis, as it combines individual survey data with aggregated and coded newspaper data. Yet, as emphasized by Curran and Bauer (2011), it is not simply the combination of data from different levels of analysis that creates an ecological fallacy but the misattribution across levels. The newspaper coding does not reflect the individuals' own perceptions, knowledge, or experiences of political tension and ingroup threat, but these variables were calculated to reflect the characteristics of the political climate at the time of each individual's interview. As their coded values vary across individuals and across time points, the newspaper variables must be added to the within-person equation at Level 1 rather than a higher level (Singer & Willett, 2003). As in any study but perhaps more importantly here, it is necessary to be careful when interpreting the relation between the newspaper coding and survey data so as not to overstate the findings by implying causality.

Multilevel Moderation

As stated above, the goal of this analysis was to test if the relation between sectarian violence exposure and emotional insecurity varied at different levels of the political climate. To answer this question, the model not only included multiple levels (i.e., nesting time within individuals), but it also included an interaction (i.e., between sectarian violence exposure and the political climate). The interaction provides information on *when* and *for whom* violence exposure impacts emotional insecurity. A simple test of moderation requires a model that includes an independent variable, a moderator, and the product of these two variables (Baron & Kenny, 1986; Cohen, Cohen, West, & Aiken, 2003). Testing the moderation effects in a multilevel model, however,

is more complex. As noted by Preacher, Zhang, and Zyphur (2016), there are a number of statistical and conceptual problems that accompany multilevel moderations, particularly with regard to the conflation of effects across levels.

One feature of the multilevel model is the inclusion of within-person effects at Level 1 and between-person effects at Level 2. As these effects are both conceptually and empirically distinct, it is important to design the model in a way that keeps them separate (Wang & Maxwell, 2015). A *between-person* moderation effect shows comparisons between multiple people based on how they scored on a set of variables. For instance, are children who grew up with an abusive parent more likely to become abusers than children who did not grow up with an abusive parent, and is this effect different for men than for women? On the other hand, a *within-person* moderation effect shows the relation between a set of variables within a single person over time. Is Participant A more anxious during periods of high family conflict compared to periods of low family conflict? Is this relation stronger or weaker during periods of high extracurricular participation? In addition to the between- and within-person effects, multilevel moderations can also include *cross-level* effects wherein a Level 2 variable moderates the effect of a Level 1 variable. Is the impact of stress on the student's academic performance over time (within-person) different for those who have highly educated parents (between-person)? Including all three of these interaction terms in a multilevel model can help to avoid confounding moderation effects and improve the interpretability of results (Park, Wang, Williams, & Alegría, 2017; Preacher et al., 2016).

The within-person and cross-level moderation effects are of particular interest in the current study (see Figure 3). Here, the within-person effect represents the dynamic relation between the political climate, sectarian violence exposure, and emotional insecurity for each individual over time. Is the adolescent more emotionally insecure during periods of high sectarian violence exposure? Is this relation stronger during periods of high political tension or ingroup threat? This moderation effect shows the extent to which each adolescent's emotional insecurity fluctuates along with their social environment after accounting for differences between people. In contrast, the cross-level moderation shows how the political climate impacts each individual's emotional insecurity at different levels of *cumulative* exposure to sectarian violence. Do adolescents who have been exposed to higher than average levels of sectarian violence respond differently to political tension and ingroup threat than their peers who have been exposed to less violence? Distinguishing between these relations not only makes it easier to interpret the results but it also provides more precision about these processes, which can have important implications for intervention and policy (Park et al., 2017).

Following from this, the current study focuses primarily on the within-person and cross-level moderation effects using three separate analyses: (1) Political tension between Catholics and Protestants (Tension) \times Exposure to Sectarian Violence (SectarianV); (2) Threat or detrimental impact to

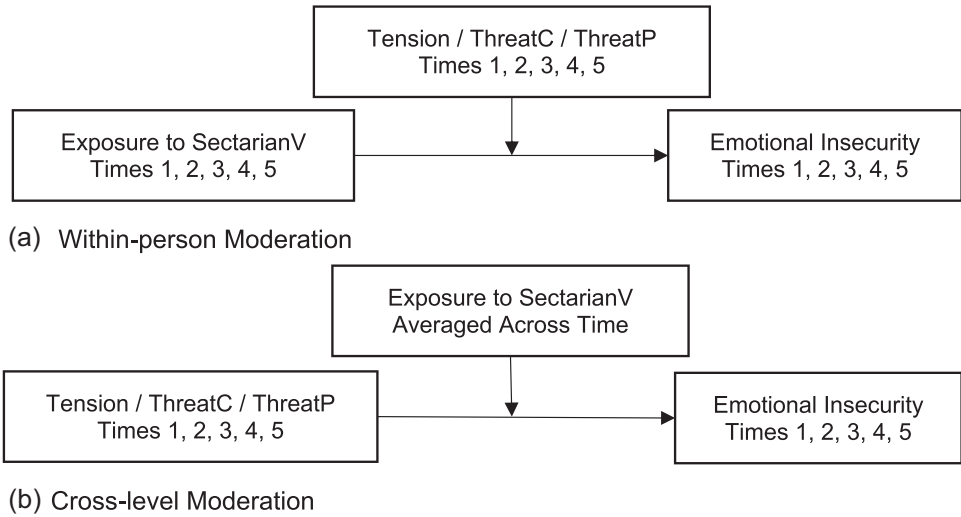


FIGURE 3.—Path diagrams illustrating within-person and cross-level moderation effects. (a) The within-person effects indicate whether the relation between an adolescent’s exposure to sectarian violence and their emotional insecurity changes based on what is happening in the political macrosystem at the time of each interview (i.e., Tension—political tension, ThreatC—threat to Catholics, or ThreatP—threat to Protestants). (b) The cross-level effects indicate whether the relation between what is happening in the political macrosystem at the time of each interview and adolescents’ emotional insecurity differs based on one’s *cumulative* exposure to sectarian violence.

Catholics (ThreatC) × Exposure to Sectarian Violence (SectarianV); and (3) Threat or detrimental impact to Protestants (ThreatP) × Exposure to Sectarian Violence (SectarianV). Each of these interactions shows the extent to which the relation between exposure to sectarian violence and emotional insecurity varies at different levels of the political climate. As shown in Figure 4, each analysis included a model with five waves of data nested within the individual (Raudenbush & Bryk, 2002; Singer & Willett, 2003). The adolescent’s age, the time-varying covariates (SectarianV, Macro), and their interaction (SectarianV × Macro) were included at Level 1. The adolescent’s ethnicity (Catholic or Protestant), person-level covariates (average SectarianV, average Macro), and their interaction (average SectarianV × average Macro) were included at Level 2. After conducting these analyses on the full sample of adolescents, follow-up analyses were conducted on samples of only Catholics and only Protestants in order to clarify the interpretation of results.

Mean Centering

Prior to conducting any of the analyses, the time variable (Age) and all of the time-varying covariates (SectarianV, Tension, ThreatC, and ThreatP) had to be centered. This was done for a few reasons. First, centering the time variable makes it easier to interpret (Biesanz et al., 2004; Singer & Willett,

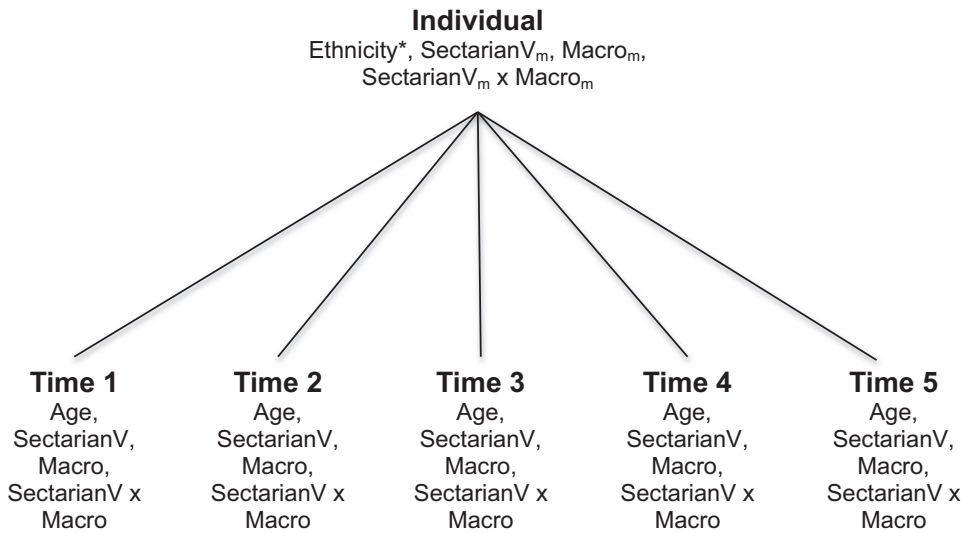


FIGURE 4.—Diagram illustrating the two-level models with all five time points nested within each individual. Level 1 includes the adolescent’s age, exposure to sectarian violence (SectarianV), the political macrosystem at the time of interview (Macro), and the interaction between the two (SectarianV × Macro) at each time point. Level 2 includes the adolescent’s ethnicity, exposure to sectarian violence averaged across all time points (SectarianV_m), the political macrosystem at the time of interview averaged across all time points (Macro_m), and their interaction (SectarianV_m × Macro_m). For each model that was run, “Macro” was substituted with one of the three macro-level newspaper variables (Tension—political tension, ThreatC—threat to Catholics, or ThreatP—threat to Protestants). *Ethnicity was only included in the models run using the full sample of participants. This variable was omitted in models run using Catholic-only or Protestant-only participants.

2003). If the analyses were conducted using the *uncentered* age variable, its intercept would represent adolescents’ emotional insecurity at age 0, which is far outside the range of this data. Instead, age was centered by subtracting 8 years (i.e., the lowest age value in the study) from each value of age. Using this centered time variable allows the intercept to estimate adolescents’ emotional insecurity at age 8, with each of the subsequent time units representing a 1-year increase in age.

Centering each of the time-varying covariates was also necessary for this study but for different reasons than the time variable. Although centering the covariates may similarly make it easier to interpret the results, values of zero are meaningful for the specific covariates that were used. For instance, it was entirely possible that certain adolescents were not exposed to *any* sectarian violence in the community, and it was also possible that there was no political tension or ingroup threat at the time of the interview. Here, centering the time-varying covariates was necessary for the purposes of disaggregating the within-person and between-person effects (Curran & Bauer, 2011; Wang & Maxwell, 2015). This was done by centering each covariate

(SectarianV, Tension, ThreatC, ThreatP) around the person-mean. Whereas the grand mean is calculated by averaging the covariate across all time points and all individuals, the person-mean is calculated by averaging the covariate across all time points within an individual. This person-specific mean is then subtracted from each of the individual's own covariate values. Centering in this way shows how the individual deviates from their own average at each time point rather than conflating between- and within-person parameters by showing how the individual deviates from the grand mean.

General Equation

For each set of analyses using the full sample of participants, the Catholic-only sample, and the Protestant-only sample, the following equation was used.

Level 1:

$$\begin{aligned} \text{Insecurity}_{ij} = & \beta_{0i} + \beta_{1i}(\text{Age}_{ij} - 8) + \beta_2(\text{SectarianV}_{ij} - \text{SectarianV}_i) \\ & + \beta_3(\text{Macro}_{ij} - \text{Macro}_i) + \beta_4(\text{SectarianV}_{ij} - \text{SectarianV}_i) \\ & \times (\text{Macro}_{ij} - \text{Macro}_i) + r_{ij} \end{aligned}$$

Level 2:

$$\begin{aligned} \beta_{0i} = & \gamma_{00} + \gamma_{01}(\text{SectarianV}_i) + \gamma_{02}(\text{Macro}_i) + \gamma_{03}(\text{Macro}_i) \times (\text{SectarianV}_i) \\ & + \gamma_{04}(\text{Ethnicity}_i) + u_{0i} \\ \beta_{1i} = & \gamma_{10} + \gamma_{11}(\text{SectarianV}_i) + \gamma_{12}(\text{Macro}_i) + \gamma_{13}(\text{Macro}_i) \times (\text{SectarianV}_i) \\ & + \gamma_{14}(\text{Ethnicity}_i) + u_{1i} \\ \beta_{2i} = & \gamma_{20} + \gamma_{21}(\text{Macro}_i) + \gamma_{22}(\text{Ethnicity}_i) + u_{2i} \\ \beta_{3i} = & \gamma_{30} + \gamma_{31}(\text{SectarianV}_i) + \gamma_{32}(\text{Ethnicity}_i) + u_{3i} \\ \beta_{4i} = & \gamma_{40} + \gamma_{41}(\text{Ethnicity}_i) + u_{4i} \end{aligned}$$

Level 1 includes the within-person effects of the intercept, age, both time-varying covariates (SectarianV, Macro), their interaction (SectarianV \times Macro), and the amount of individual variability at each time point around the person-mean (r_{ij}). Centering of the time variable is depicted by subtracting 8 (the lowest age value in the study) from the age of each individual i at time point j . Centering of the time-varying covariates is depicted by subtracting the person-mean (Variable _{i}) from the individual's observed scores at each time point (Variable _{ij}). In this general equation, "Macro" is a stand-in for the one of the three macro-level variables (Tension, ThreatC, or ThreatP),

as these variables were analyzed using separate models rather than including all three in the same model.

At Level 2, each of the within-person effects is predicted by the relevant person-level means, which is consistent with Preacher et al.'s (2016) suggestions for multilevel moderation analyses in which the moderating, independent, and dependent variables are all measured at Level 1. Including these person-specific means at Level 2 shows how the individual's cumulative exposure to sectarian violence (SectarianV_i), the average state of the political macrosystem across all their interviews (Macro_i), and their interaction ($\text{SectarianV}_i \times \text{Macro}_i$) may differentially predict their initial status of emotional insecurity (γ_{01} , γ_{02} , γ_{03}) and its change with age (γ_{11} , γ_{12} , γ_{13}). The average level of political tension or ingroup threat was included as a cross-effect of within-person exposure to sectarian violence (γ_{21}), and the person-level average of exposure to sectarian violence was included as a cross-effect of political tension or ingroup threat at the time of interview (γ_{31}). For the models using the full sample of participants, ethnicity was added as a Level 2 control for each effect (γ_{04} , γ_{14} , γ_{22} , γ_{32} , γ_{41}). The ethnicity variable was excluded in the analyses using Catholic-only and Protestant-only samples. Level 2 also includes the extent to which individuals deviated from each group mean (u_i), though the specific terms that were included varied by model. The specific equations for each model are further explained in Chapter XI.

As noted in Figure 3, the two parameters of interest in these analyses are the within-person moderation effect (γ_{40}) and the cross-level moderation effect of exposure to sectarian violence (γ_{31}). Again, the within-person moderation effect (γ_{40}) captures the interaction between exposure to sectarian violence at each time point and the level of tension or threat in the macrosystem at the time of each interview ($\text{SectarianV}_{ij} \times \text{Macro}_{ij}$). It shows how the within-person association between exposure to sectarian violence and emotional insecurity changes across time, and how this association varies according to the level of tension or threat in the macrosystem. The cross-level effect of interest (γ_{31}) compares adolescents to their peers based on cumulative exposure to sectarian violence, which was calculated by averaging each adolescent's sectarian violence exposure across all five time points. This effect captures the association between time-variant political tension and emotional insecurity, and whether this association is stronger (or weaker) for adolescents that have more (or less) experience with sectarian violence.

The cross-level effect for the macro-level variable (γ_{21}) was of less interest in this study. As described above, each macro-level variable (Macro_{ij}) was calculated by averaging the newspaper coding for the 3 months prior to each family's interview. This means that the *person-level* variable (Macro_i) was calculated by averaging this 3-month summary across all five time points. It did not seem conceptually meaningful to look at "cumulative" political tension and "cumulative" ingroup threat when these refer narrowly to an average of 3-month time frames. The sociopolitical activity occurring throughout the

summer and autumn months would still be excluded. A more conceptually meaningful approach would require the newspaper coding to be averaged across the entirety of the five time points. This average, however, would be identical for each participant in the study, and a moderation analysis would not be possible.

Missing Data

As is expected in longitudinal research, there are some missing data for the survey variables used in this study as a result of attrition across each wave and nonresponse items (i.e., for exposure to sectarian violence and emotional insecurity about the community). It was thus important to assess the patterns and mechanisms of these missing data in order to determine which parameter estimation method would be most effective (Graham, 2009; Little & Rubin, 2014; Nicholson et al., 2017). As shown in Table 1, there were no significant differences in Wave 1 emotional insecurity for those who stayed in the study and those who dropped out. There were, however, significant differences in Wave 1 sectarian violence exposure (SectarianV), suggesting that the difference between retained and attrited adolescents was conditional on their observable SectarianV scores. The data can be treated as “missing at random” by using SectarianV to control for the missingness (Little & Rubin, 2014; Singer & Willet, 2003).

The missing parameters were estimated using full information maximum likelihood (FIML) estimation. With large samples sizes like the one used in this study, the FIML approach uses all the observed values for each individual to produce parameter estimates that are asymptotically unbiased, normally distributed, and with small standard errors (Singer & Willet, 2003). Provided that the data are indeed missing at random, FIML can estimate parameters even when there are marked differences between those who remained in the study and those who left (Graham, 2009). Further, by maximizing the likelihood of all sample data, FIML can test the fit of the entire model, including its fixed and random effects (Singer & Willet, 2003). It is thus necessary to use this method when comparing models based on a combination of these effects, as is done in the current study. Here, an unconditional intercept-only model was first compared to an unconditional linear growth model to determine which provided a better baseline for the conditional model. Each model was compared using a deviance statistic ($-2LL$). The extent to which the time-varying covariates and interaction terms were modeled as fixed or random effects varied by each model and is discussed in Chapter XI.

Thematic Analysis

After running the multilevel moderation models, a thematic analysis was conducted on a sample of the raw news articles in order to more easily

interpret the quantitative findings. This analysis revealed the specific sociopolitical events and intergroup discourse that took place in Northern Ireland during the study period. It also illuminated which themes the newspaper coders found to be indicative of high political tension, high threat to Catholics, and high threat to Protestants. Although it can be argued that the quantitative findings are informative on their own, contextualizing them with a qualitative analysis has its benefits. For instance, if the relation between direct exposure to sectarian violence and emotional insecurity changes based on levels of ingroup threat in the macrosystem, as hypothesized, then it can be helpful to know which news reports and events were coded as particularly threatening.

The analytic process used in this study was informed by Braun and Clarke's (2006) approach to thematic analysis. This method was chosen over other qualitative methods (e.g., discourse analysis, content analysis) because of its ability to be applied independently of theory. This allows for a more inductive process where the researcher can describe the data set according to whichever themes emerge rather than restricting the analysis to predetermined categories and keywords (e.g., searching for themes related specifically to police corruption). The themes generated by this analysis can further highlight how adolescents' experience of sectarian violence may be "the effects of a range of discourses operating within society" (Braun & Clarke, 2006, p. 81).

Townsend (2016) previously conducted a thematic analysis on this newspaper data set using Braun and Clarke's method. In that study, she thematically analyzed 24 news articles reflecting the highest level of political tension between Catholics and Protestants. The following themes emerged from that study: *intractability*, *ineffective policing and justice*, *family and community unrest*, *memories of violence*, *othering*, and *violent imagery*. The current study uses the same method on the same data set as Townsend (2016) but includes a much larger subset of news articles reflecting high political tension, high threat to Catholics, and high threat to Protestants. Specifically, from all the news articles that were used for the quantitative portion of the study ($N = 2,797$), those with the highest ratings in each category were selected (i.e., on a Likert scale from 0 to 4, those with an average rating of 3 or higher). This resulted in a pool of 421 articles reflecting high political tension, high threat to Catholics, and high threat to Protestants. All the articles that had been categorized as conveying high threat to Protestants ($n = 52$), and all the articles that had been categorized as conveying high threat to Catholics ($n = 93$) were included in the thematic analysis. Due to the large number of articles that had been categorized as conveying high political tension ($n = 276$), only a subsample of these was used for the analysis (25% of the total, $n = 69$). This subsample was randomly selected from the pool of 276 after stratifying by wave. This ensured that the number of articles analyzed per wave was roughly proportional to the total number of articles in each wave. As Wave 3 only included

five articles, however, all five were included in the analysis (see Table 4 in Chapter XI for more detail).

First, all 214 articles (Tension: $n = 69$; ThreatC: $n = 93$; ThreatP: $n = 52$) were read for familiarization and to obtain a sense of each article's content and breadth. Notes were taken on each article's core message in order to provide a basic outline of the data. Next, the articles were read a second time while applying codes. These codes were not interpretive but simply described the information given in each article (e.g., failure of police to intervene, ongoing investigation related to the Troubles). Codes were applied to anything in the article that stood out as meaningful. Once this step was complete, all the generated codes were sorted into overarching themes. No theory was applied to generate these themes. Rather, the intention was to capture the "explicit or surface meaning of the data" (Braun & Clarke, 2006, p. 84) while also representing "some level of *patterned* response or meaning within the data set" (p. 82). See Table 3 for a few examples of how data extracts were coded and grouped into themes in the original study (Townsend, 2016).

TABLE 3
EXAMPLES OF DATA EXTRACT CODING FOR THEMATIC ANALYSIS, TOWNSEND (2016)

Data Extracts	Coded as	Theme
"One of Belfast's most notorious interfaces has been the scene of sustained missile throwing since December" (Fatogun, 2006)	<i>Patterned/recurring violence</i>	Intractability
"Loyalist paramilitaries were ready to abandon their plans for decommissioning and return to arms after dissident republicans killed two soldiers and a policeman" ("Murders," 2009)	<i>Slowing the peace process; Dissident attacks</i>	
"I have no doubt that there was collusion between members of the UDR, RUC and loyalist paramilitaries on the attack on Donnelly's bar" ("Shock truth," 2006)	<i>Police collusion with paramilitaries; Distrust of police</i>	Ineffective Policing and Justice
"The investigation had not been efficiently or properly carried out; no earnest effort was made to identify those responsible; and there were suspicions of state collusion in the murders" ("Seventeen years," 2011)	<i>Ineffective policing; No justice for victims</i>	

(Continued)

TABLE 3. (Continued)

Data Extracts	Coded as	Theme
“The families of six men murdered... have spoken of their sense of ‘frustration’ and ‘betrayal’ at the lack of progress in catching their loved ones’ killers” (McCaffrey, 2007c)	<i>Family trauma</i>	Family and Community Unrest
“More than 700 youths gathered at the bottom of the Lower Newtownards Road last night and threw petrol bombs, bricks, bottles and fireworks at PSNI Land Rovers” (“Short Strand,” 2011)	<i>Youth participation; Neighborhood disturbance</i>	
“The family of a taxi driver lured to his death by a loyalist murder squad have called for an independent inquiry as they prepare to mark the 20th anniversary of his killing” (Rutherford, 2010)	<i>Investigations; Looking back</i>	Memories of Violence
“I will always be nervous after what happened, which is why I have left Northern Ireland and I am not sure if I will ever go back” (McAleese, 2007)	<i>Ongoing effects; Looking back</i>	
“Findlay branded the incident a ‘blatant act of sectarianism’ carried out by ‘vermin’ (Smyth, 2009)	<i>Dehumanization</i>	Othering
“The direction in which he was walking towards north Belfast meant the UVF gang knew their victim was a Catholic” (“UVF stands down,” 2007)	<i>Targeting outgroup</i>	
“Mr. Reed, who only escaped his attackers when they went in search of a saw to cut him up and dispose of his body, has since left the province” (McAleese, 2007)	<i>Brutality</i>	Violent Imagery
“His burnt-out taxi was found outside a farmhouse at Derryane Road the next morning. Mr. Hughes’ remains lay across the front seats of his cab” (Rutherford, 2010)	<i>Brutality; Bombing</i>	

XI. Results

As described in the data analytic strategy, quantitative analyses of the survey data and newspaper coding were conducted first to assess the relations between adolescents' exposure to sectarian violence, political tension and ingroup threat in the macrosystem, and emotional insecurity about the community. These were followed by a qualitative analysis of the raw news reports in order to identify the specific themes, events, and discourse comprising the political tension and ingroup threat variables. Although the qualitative analyses were conducted second, we present the qualitative findings first, because we think that it will be helpful for readers to have a deeper understanding of the broader context underpinning the macrosystem variables before engaging with the quantitative results. Beginning with a timeline of major events that transpired during the study and following it with the major themes emerging from the three newspaper variables will make it easier to interpret and contextualize the multilevel moderation analyses.

Timeline of Events

The focal point of the current study was to assess the macro-level forces operating during a particular time in Northern Ireland and to test their contribution to the proximal processes governing adolescent development and wellbeing. As context is central to the questions being asked, this section includes a timeline of the major events and points of discourse connected to Catholic–Protestant relations that took place during data collection. The timeline shows that although the study began nearly a decade after the signing of the Belfast Agreement, conflict between Catholic and Protestant communities persisted in many forms. For instance, sectarian-motivated violence was prevalent. During the period of data collection, an average of 1,072 incidents of sectarian-motivated crime were reported to the police each year (Northern Ireland Statistics, 2017). The actual number of sectarian crimes is likely to have been even higher, as historical distrust of police in Northern Ireland has allowed many sectarian crimes to go unreported (MacGinty et al., 2007; Shirlow & Ellison, 2009; Shirlow, Taylor, Merrilees, Goeke-Morey, & Cummings, 2013). In addition to the presence of sectarian crime, major components of the peace accord were still being implemented and debated at this time. These structural and symbolic changes informed

much of the political climate. The following timeline was constructed by reading through the news articles and compiling the most notable and frequently reported events. Its validity was checked against other timelines of the conflict, which also included these same events (e.g., Clarke, Sturcke, & Percival, 2009; France24, 2010; “Timeline,” n.d.).

Wave 1

Important shifts took place in the peace process during the first wave of data collection (November 2006–May 2007). The most prominent of these was the reinstitution of the Northern Ireland Assembly. To provide a brief history of this legislature: The Northern Ireland Assembly was first created at the height of the Troubles to decentralize governing powers from the Parliament of the United Kingdom to Northern Ireland and to ensure that powers would be shared between Irish nationalists (Catholics) and unionists (Protestants). The Assembly dissolved soon after. In an attempt to rectify this, the 1998 Belfast Agreement called for reinstitution of the Northern Ireland Assembly. Electing a First Minister from one community and a Deputy First Minister from the other community would help safeguard the rights and interests of both sides (Hancock, 2008; McWilliams & Fearon, 1999). Yet, even after the Belfast Agreement, the newly formed Assembly was suspended on multiple occasions—once for nearly 5 years due to an impasse regarding paramilitary disarmament. The Assembly was finally restored during Wave 1 of this study when leadership from both sides met for the first time and negotiated an agreement (“Another step,” 2007; “Devolution restored,” 2007; Graham, 2007). Those involved in the peace process hoped that reestablishing the Assembly would catalyze intergroup reconciliation and serve as a sign of positive change for the region (Adams, 2007; Paisley, 2007). Soon after the Assembly’s reinstitution, two of the loyalist paramilitary organizations (the UVF and RHC) stated that they would end their armed campaigns (“UVF stands down,” 2007), and the British military officially withdrew from Northern Ireland (Thornton, 2007).

Wave 2

The second wave of data collection (December 2007–February 2008) was substantially shorter than the first wave, and few notable events transpired. The incident most relevant to the conflict and peace process was a statement from another loyalist paramilitary group (the UDA) announcing an end to its armed campaign. According to reports from both newspapers, many people were ambivalent about the announcement (McCaffrey, 2007b; McCambridge, 2007). Some thought it was an important statement and a hopeful sign for things to come, while others were less willing to trust that the UDA’s words were genuine. Between the second and third waves, one of the republican

paramilitary groups (the Continuity IRA) signaled its reemergence by firing a grenade at a police patrol and inciting a riot that turned violent (Moulton, 2008; “Provo Semtex,” 2008).

Wave 3

No major events related to the conflict or peace process occurred during the third wave of data collection (December 2008–February 2009). Most of the articles during this period reported on sectarian-motivated crime, legislative disputes, or ongoing investigations into events that took place during the Troubles. Soon after the third wave ended, however, a number of republican paramilitary groups (the Continuity IRA, Real IRA, and Óglaigh na hÉireann) began a campaign of attacks against the police that would continue over the next few years. This began with the killing of two British soldiers and a Catholic police officer, which was the first police fatality in over 10 years (Connolly, 2009; Curran, 2009; “Peace Shattered,” 2009; “Provo Semtex,” 2008). In opposition to the mounting violence, another of the republican paramilitary groups (the INLA) announced the end of their armed campaign, and two of the loyalist paramilitary groups (the UVF and RHC) officially decommissioned their weapons (“Time will tell,” 2009; “Weapons move,” 2009).

Wave 4

The fourth wave of data collection (January 2, 2010–May 6, 2010) coincided with a decrease in the number of sectarian crimes reported to the police (Northern Ireland Statistics, 2017) but a spike in dissident republican attacks *against* the police. While these attacks were happening, another major shift in the peace process took place: policing and justice powers were devolved to the newly restored Northern Ireland Assembly. During the decades of British rule, one of the institutions they controlled was the police service. Inherent to this setup was police bias in favor of the Protestant community, which led to massive corruption in the justice system and a deep distrust of police—particularly among Catholics (Ellison & Mulcahy, 2001). In February 2010, after years of negotiation between the political parties, the policing and justice powers were turned over to a cross-community department in Northern Ireland (“Deal is sealed,” 2010; McCambridge & Lister, 2010; Rusk, 2010). Surrounding this event, the UDA and INLA officially decommissioned their weapons (“More steps,” 2010; Rowan, 2010). Despite this progress, much of the discourse at this time was dominated by dissident republican attacks at the courthouse, police stations, and intelligence agency (“Dissident republican,” 2010; “Fury,” 2010; McCaffrey, 2010a; “Security alerts,” 2010).

Wave 5

Between the fourth and fifth waves of data collection, certain components of the peace process came under scrutiny yet again. The UVF—one of the

loyalist paramilitaries that claimed to decommission its weapons in 2009—was blamed for the murder of a former RHC prisoner. This led many people to question the effectiveness of the decommissioning process and the extent to which paramilitaries were honest about their intentions to disband (“Did UVF leaders,” 2010; “Why we like,” 2010). As the success of paramilitary disarmament turned to skepticism and distrust, republican paramilitary groups continued their campaign of attacks. These groups orchestrated a series of riots during the parading season (“It’s the lost generation,” 2010; McCaffrey, 2010b) and bombing attacks against the police (McAleese, 2011; Robinson, 2011). This dissident activity continued at a high level throughout the fifth wave of data collection (March 3, 2011–May 28, 2011). In the midst of this violence, the two watchdog groups tasked with overseeing the peace process were dissolved, and the British and Irish governments praised their work toward creating a peaceful, stable and inclusive society (“Peace process,” 2011).

Thematic Analysis of News Reports

In addition to noting the major events happening in Northern Ireland during the study, it was also informative to gauge how these events were reflected in the three coded newspaper variables: political tension, threat to Catholics, and threat to Protestants. Elucidating the coders’ interpretation of these constructs can further clarify the processes through which high tension and high threat in the macrosystem may have impacted the surveyed adolescents. As discussed in the data analytic strategy, a thematic analysis was previously conducted on a subset of articles in this newspaper data set (Townsend, 2016). This prior analysis revealed that a subsample of articles reflecting high political tension between Catholics and Protestants ($n = 24$) contained themes of *intractability*, *ineffective policing and justice*, *family and community unrest*, *memories of violence*, *othering*, and *violent imagery* (Table 3). The current study expanded on this by analyzing a larger subsample of articles rated at the highest levels of political tension ($n = 69$) and all articles rated at the highest levels of threat to Catholics ($n = 93$) and threat to Protestants ($n = 52$).

Of the six themes from the original analysis, three remained prevalent in the current analysis: *Ineffective policing and justice*, *family and community unrest*, and *memories of violence*. The first of these (*ineffective policing and justice*) is unsurprising, as the timeline above shows how policing was prominent in Northern Ireland’s political discourse during the study period. Major events that transpired include a spike in dissident attacks against the police and the negotiated devolution of policing and justice powers. The policing and justice theme extended beyond these two events, however, as articles covering smaller incidents of sectarian-motivated crime often discussed individuals’ frustration with the police, the police’s inability to protect neighborhoods, or the system’s repeated failure to deliver justice to those harmed during

the Troubles. Specific codes comprising this theme included: impunity for perpetrators; lack of justice for victims; police collusion with paramilitaries; failure of police to intervene or curb attacks; and lack of police resources.

Family and community unrest most frequently referred to articles covering incidents of sectarian crime and antisocial behavior in neighborhoods, often including quotes where residents gave specific details of how the violence affected their family's wellbeing. Some of the codes included in this theme were: families being driven out of town; neighborhood disturbances; complaints from community members; attacks on homes, churches or community centers; and youth victims and/or perpetrators.

The *Memories of Violence* theme was often applied to articles reflecting on incidents from the past rather than current violence. Some of these articles observed the anniversaries of major events that took place at the height of the Troubles, while others reported on information that is still being uncovered through truth-seeking committees, probes, and investigations into past incidents. The codes comprising this theme included: ongoing investigations related to the Troubles, new information on past events, trauma from the past; and remembering past events.

The previously identified themes of *intractability*, *othering*, and *violent imagery* were less notable in the current analysis. The reason for this is that most of the codes comprising these themes referred to specific language usage in the articles rather than the overarching message. For instance, the *violent imagery* theme was often applied to articles that included particularly brutal or gruesome descriptions of violence. *Othering* was applied to quotes in which individuals blamed the outgroup or spoke about them in a dehumanizing way. *Intractability* was applied to phrases suggesting that the conflict is never going to end, the peace process is moving backwards, and violence is cyclical. Unlike the other themes, these three were most often applied at the sub-article level and did not typically capture its overall message. If this were a study focusing on the impact of media messaging on individuals, then these themes could be useful. The intention of this study, however, is not to conduct of micro-analysis of language use in the media but to use reported events as a proxy for what was happening in political macrosystem.

In addition to confirming three of the previous themes (*ineffective policing and justice*, *family and community unrest*, and *memories of violence*), the current analysis also identified two additional themes: *destabilized leadership* and *organized paramilitary activity*. Like the others, these themes described the explicit message of each article rather analyzing the subtext. *Destabilized leadership* applied to articles discussing some attempt—sometimes violent, sometimes not—to undermine specific politicians, entire political parties, the police service, or other public officials. The *organized paramilitary activity* theme was quite literal, reflecting activities related to the reemergence of organized paramilitary attacks, murders, and threats toward notable individuals or the police.

TABLE 4
FREQUENCY OF HIGH TENSION AND HIGH THREAT ARTICLES PER NEWSPAPER AND PER THEME

Variable	No. of Articles Rated as High (BT/IN)	Ineffective Policing and Justice	Family and Community Unrest	Memories of Violence	Destabilized Leadership	Organized Paramilitary Activity
Political Tension ^a						
Wave 1	16 (6/10)	3	8	4	2	2
Wave 2	7 (3/4)	1	3	2	1	2
Wave 3	5 (0/5)	0	4	1	1	0
Wave 4	14 (7/7)	2	8	3	1	5
Wave 5	27 (10/9)	0	11	5	11	10
Total	69 (31/38)	6	34	15	16	19
Threat to Catholics						
Wave 1	16 (6/10)	3	8	9	1	1
Wave 2	8 (4/4)	3	7	1	1	0
Wave 3	10 (4/6)	0	4	6	0	1
Wave 4	25 (13/12)	2	8	6	4	10
Wave 5	34 (15/19)	4	17	6	15	12
Total	93 (42/51)	12	44	28	21	24
Threat to Protestants						
Wave 1	6 (3/3)	0	3	1	1	1
Wave 2	1 (1/0)	0	1	0	0	1
Wave 3	10 (6/4)	1	4	5	1	3
Wave 4	18 (11/7)	5	5	2	8	13
Wave 5	17 (8/9)	0	8	3	7	9
Total	52 (29/23)	6	21	11	17	27

Note. The total number of articles analyzed with an average rating of 3 or higher (on a Likert scale from 0 to 4), the number of articles per newspaper with an average rating of 3 or higher, and the number of articles demonstrating each of the five themes are shown. In some cases, multiple themes were applied to a single article.

BT = *Belfast Telegraph*; IN = *The Irish News*.

^aAs mentioned, all of the articles reflecting high threat to Catholics in the data set ($n = 93$) and all of the articles reflecting high threat to Protestants in the data set ($n = 52$) were analyzed. Due to the large number of articles reflecting high political tension ($n = 276$), only a subsample was included in the thematic analysis (25%, $n = 69$). The total number of high political tension articles by wave and newspaper is Wave 1: 49 (19/30), Wave 2: 14 (6/8), Wave 3: 5 (0/5), Wave 4: 99 (49/50), Wave 5: 109 (55/54).

Table 4 shows the five themes emerging from the current thematic analysis as well as the number of articles exhibiting these themes at each wave. As it shows, the themes were not evenly distributed across variable or across wave. Rather, some themes appeared more in certain variables or at certain waves. *Family and community unrest*, for instance, was by far the most commonly appearing theme in articles reflecting both high political tension and high threat to Catholics. This suggests that generalized intergroup tension in the macrosystem may have been largely related to local neighborhood disturbances. During the study period, these incidents was presumed to be particularly threatening for Catholics. For articles reflecting high threat to Protestants, the *organized paramilitary activity* theme appeared more frequently than *family and community unrest*. Paramilitary activity may

have been coded as especially threatening to Protestants, because the most visible activity during this time was led by dissident republican groups (i.e., groups belonging to the Catholic community). With regard to differences between each wave, *ineffective policing and justice* and *memories of violence* were similarly represented at each wave, suggesting that these themes may be more consistently recurring. *Organized paramilitary activity* and *destabilized leadership* were more prevalent in the fourth and fifth waves as dissident violence was at its peak, and *family and community unrest* showed a slight increase in the fifth wave.

A closer look at the articles included in the thematic analysis also revealed differences in the way that coders rated “threat to Catholics” and “threat to Protestants” across the study period. In Waves 1–3, articles reflecting high threat to Catholics often included discussion of sectarian-motivated violence committed against Catholics by loyalist gangs or mobs (i.e., hardliners from the Protestant community). Articles carrying the *memories of violence* theme discussed events in which Catholics had been attacked or murdered by loyalist groups throughout the Troubles. In other words, during these waves, events viewed as highly threatening to Catholics focused on intergroup violence. This can be seen in the following excerpts:

A Catholic mother, who was nursing her six-day-old son four weeks ago when a loyalist mob brandishing cross-bows, baseball bats and iron bars tried to smash their way into her north Belfast home, said last night she had no confidence in police catching those responsible. “When have they ever been caught? They (the police) have failed us” (O’Neill, 2006).

A North Belfast priest has warned that it is not safe for Catholic men to walk alone, while another cleric has hit out at police following a loyalist attack on homes... “Some people think that the bad days are over and that young people are now safe walking the streets alone, but unfortunately it appears those bad days aren’t over yet,” he said (McCaffrey, 2007a).

A gang of loyalists in the town were behind the threat, the man said, as well as other intimidation against the family... “They are failing to protect this family and other Catholics in the village from the loyalist gang who are based in the village” (“I fear for the life,” 2007).

A Catholic family-of-five are quitting the Co. Antrim village of Stoneyford after a police warning that loyalists were about to launch a bomb attack on their home... The bomb threat is the latest act of loyalist intimidation in the village, which has already forced three Catholic neighbors to leave the area in the last two years (“Catholic family,” 2008).

Articles reflecting high threat to Protestants during Wave 1–3 tended to cover sectarian violence committed against Protestants by republican gangs or

mobs (i.e., hardliners from the Catholic community). Those carrying the *memories of violence* theme covered past incidents in which Protestants had been murdered by republican groups. Again, events viewed as threatening to Protestants during these waves focused on intergroup violence. For example:

Sectarian attacks on churches and Orange halls have cost the taxpayer more than £4 million in the past five years... An Orange Order spokesman said last month there had been more than 250 attacks on Orange halls over the past 17 years (Simpson, 2006).

A disgusted grandmother told today how her seven-year-old granddaughter could have been killed as she played just yards from a lethal device thrown into her garden by bombers... Dissident republicans have waged a campaign against members of the DPP in the Strabane area, where [they] were all subject to hoax bomb alerts and arson attacks on vehicles in recent years (Mullan, 2007).

Arsonists attacked the home of a DUP councillor... Police are treating it as sectarian... They also scrawled the words “Orange Scum” on the gable walls of the house. The attack... resembles arson attacks on Orange Halls throughout Northern Ireland in recent months (Rusk, 2008).

As a note, the Orange Order is a Protestant-unionist organization that has often served as a point of contention in the conflict (e.g., by organizing unionist marches during the parading season). Both sets of excerpts show that the “threat to Catholics” variable tended to include attacks against the Catholic community by Protestants, and the “threat to Protestants” variable tended to include attacks against the Protestant community by Catholics during Waves 1–3.

In Waves 4 and 5, however, this pattern changed. Articles reflecting high threat to Catholics started to extend beyond loyalist attacks on the Catholic community. Some of these articles continued to cover attacks against Catholic individuals, but most of them dealt more generally with the increase in *republican* paramilitary activity (i.e., the paramilitaries comprised of hardline Catholics). These articles include the following quotes:

“This is probably as severe a situation as we’ve seen since that Real IRA bombing campaign of 1997 going into 1998... It feels to us, just looking at it in every way, that this has picked up in terms of intensity and severity” (Henderson, 2010).

Dozens of young people live under threat from paramilitaries in west Belfast, it has been claimed. After two men were shot in separate attacks in the past three days the West Belfast Community Safety Forum said children as young as 14 are being threatened (McCrory, 2011).

The lack of effective, community-based police services in loyalist and republican areas has created a vacuum which is being filled by paramilitary activity, leading experts have warned... One republican interviewee told the researchers: "There's a palate out there for that (paramilitary justice) because people are getting so frustrated (at the lack of state policing)" ("Terrorists," 2011).

A masked man in full paramilitary uniform read out an RIRA statement at the City Cemetery in Derry on Easter Monday. He said: "Óglaigh na hÉireann calls on any young nationalist who may have been sold the lie that the RUC/PSNI is somehow a reformed, non-political police service to think again. Those who think they are serving their community are serving the occupation and will be treated as such" ("Treat dissident gangs," 2011).

Almost 100 bombing incidents occurred in Northern Ireland in the past year, reflecting the upsurge in dissident republican activity. A proactive police response to dissident republican activity led to the arrest of 188 people for terrorist offences over the past financial year, an increase from 169 the previous year (McAleese, 2011).

As highlighted in these excerpts, many of the articles reflecting high threat to Catholics during these waves did not focus exclusively on *intergroup* violence. Instead, many of them focused on increased paramilitary activity *within* the Catholic community. There are multiple reasons why paramilitary activity emanating from within the Catholic community may have been viewed by coders as a threat to Catholics. First, these groups often spoke about recruiting Catholic youth and directing violence against the more moderate Catholic nationalists. Second, paramilitary activity by republican groups would increase the likelihood of loyalist counterattacks and police crackdowns, which would negatively impact Catholics. Lastly, the re-emergence of republican paramilitaries could risk the political gains that Catholics have made since the Belfast Agreement.

Articles reflecting high threat to Protestants during Waves 4 and 5 also covered the paramilitary activity by dissident republican groups. These articles tended to focus on details of the paramilitary attacks, the suspects who were arrested, and the impact of these attacks on police officers. For example:

Concern is growing over the safety of former members of the security services as it emerges that in the past 10 months the PSNI [Police Service of Northern Ireland] has removed 172 personal protection weapons from them. The Police Federation has warned that if cuts to the PSNI manpower and budget continue troops may have to be brought back to help tackle the terrorist threat ("The situation," 2009).

The Protestant officer, who joined the PSNI a number of years after the Good Friday Agreement and is stationed in the Greater Belfast area, said that had he known the terrorist threat would once again escalate, he may have reconsidered joining the police ("There is no doubt," 2009).

Derry has been a focal point of dissident activity over the past few years. In one of the most serious incidents, a taxi driver was forced to drive a 200lbs bomb to Strand Road PSNI station. It exploded while the area was being evacuated, causing serious damage ("Derry has been," 2011).

The police began the year with what one senior dissident republican described as "a show of strength"... Just days ago that same senior dissident said they "would sit tight until the raids are over." And, now, the news of another plot aimed at killing police officers in north Belfast. This is the war play of Oglai na hEireann, the organisation that last year told this newspaper: "Every time we are not involved in an operation we are recruiting, developing expertise, gathering intelligence and planning the next operation" ("A show of strength," 2011).

As these excerpts show, the articles most threatening to Protestants during these waves dealt with ongoing attacks against police, insufficient resources in the police department, the personal impact on officers and their families, and investigations into the attacks. The only articles about police officers that were coded as threatening to Catholics were the two cases in which Catholic police officers were killed (Poole, 2011; "This is a frightening time," 2010).

In sum, during the first three waves, events that were most threatening to Catholics and most threatening to Protestants similarly focused on intergroup violence. During the latter two waves, events that were most threatening to Protestants continued to focus on intergroup violence (particularly against police officers), while events that were most threatening to Catholics focused on *ingroup* activity (i.e., the rise in dissident violence from republican groups). These variable differences may need to be considered when interpreting the quantitative results below.

A deeper analysis of the articles reflecting high political tension did not illuminate many meaningful distinctions between this variable and the two threat variables. It comprised many of the same articles and events that were coded as threatening to Catholics and threatening to Protestants, as well as additional articles covering both loyalist and republican attacks. The political tension variable also included events that were still contentious but less violent and disruptive than the events covered by the threat variables, such as ongoing murder trials and controversial positions taken by political parties and community organizers.

Multilevel Models—Full Sample

Descriptive Statistics

The first set of analyses was conducted using the full sample of adolescents who self-identified as Catholic, Protestant, or neither. The means and standard deviations for each variable are shown in Table 5. In Wave 3, the mean exposure to sectarian violence was nearly twice as high as the other waves. This can be explained in part by the supplementary sample that was added at Wave 3. As described in the Methods above, many of the families that dropped out of the study during Waves 1 and 2 came from high-risk communities that reported more direct exposure to sectarian violence. To compensate, the supplementary sample included a larger proportion of families from these high-risk communities.

Table 5 also shows large standard deviations for exposure to sectarian violence, suggesting a wide range of exposure. A closer look at this variable reveals a positive skew with 61.5% of adolescents reporting no exposure to sectarian violence in the last 3 months, and the remaining adolescents reporting a variety of exposure from once in the past 3 months to every day. Emotional insecurity also had a positive skew with 61.7% of participants reporting low levels of emotional insecurity about the community, and the rest showing a wide distribution of security levels.

All three of the newspaper variables show lower levels of political tension and threat during Waves 1–3 and comparatively higher levels of political tension and threat during Waves 4 and 5. This aligns with information from the timeline above, as Waves 1–3 included major advances in the peace process and decommissioning of paramilitary groups, while Waves 4–5 coincided with increased violence from dissident republican groups and disillusionment with the peace process. See Supporting Information Appendix B for a clearer picture of how macro-level political tension

TABLE 5
MEANS AND STANDARD DEVIATIONS FOR STUDY VARIABLES (FULL SAMPLE)

Wave	<i>n</i>	SectarianV <i>M (SD)</i>	Tension <i>M (SD)</i>	ThreatC <i>M (SD)</i>	ThreatP <i>M (SD)</i>	Insecurity <i>M (SD)</i>
1	695	3.04 (5.77)	1.50 (.08)	0.90 (.05)	0.80 (.03)	5.89 (3.27)
2	572	2.82 (6.82)	1.39 (.05)	0.94 (.05)	0.70 (.05)	5.89 (3.13)
3	770	5.18 (9.08)	1.29 (.00)	1.03 (.00)	0.91 (.00)	5.33 (2.57)
4	631	2.91 (6.87)	1.73 (.32)	1.48 (.07)	1.25 (.07)	5.35 (2.80)
5	593	2.86 (6.80)	1.92 (.07)	1.40 (.03)	1.31 (.02)	4.61 (1.68)

Note. The descriptive statistics for the full sample of survey participants, including Catholics, Protestants, and those who identified as neither are included.

Insecurity = emotional insecurity about the community; *M* = mean; *SD* = standard deviation; SectarianV = exposure to sectarian violence; Tension = macro-level political tension; ThreatC = macro-level threat to Catholics; ThreatP = macro-level threat to Protestants.

(Supporting Information Figure B1), threat to Catholics (Supporting Information Figure B2), and threat to Protestants (Supporting Information Figure B3) fluctuated throughout each period of data collection.

Correlation analyses were run for all the variables at each wave. The full correlation table is available in the Supporting Information Appendix C (see Supporting Information Table C1). Threat to Catholics and threat to Protestants correlated highly within each wave ($p < .001$), though correlations with the political tension variable were less consistent. These correlations are supported by the qualitative findings, which revealed that articles coded as “high” threat to Catholics and “high” threat to Protestants often referred to the same events. Political tension between Catholics and Protestants, on the other hand, is a broader construct and often included the same events as the threat variables *as well as* other events and discourse that could not be characterized as threat toward one group in particular.

Each of the three newspaper variables correlated with sectarian violence at two of the five time points (SectarianV and Tension, Wave 2: $r = .20$, $p < .001$; Wave 5: $r = -.10$, $p = .02$; SectarianV and ThreatC, Wave 2: $r = .17$, $p < .001$; Wave 5: $r = -.11$, $p = .006$; SectarianV and ThreatP, Wave 1: $r = -.13$, $p = .001$; Wave 2: $r = .13$, $p = .003$). A series of collinearity tests was conducted to detect how strongly these variables correlated, as high correlations can sometimes create problems with interpretation when conducting moderation analyses (Baron & Kenny, 1986). Within each wave, the variance inflation factors (VIFs) for the dependent variable, covariates, interaction terms were all less than 1.80. This is well below the recommended cutoff for VIF values (4.0), which suggests that multicollinearity was unlikely to be an issue for these models (Hair, Black, Babin, & Anderson, 2010).

Unconditional Models

To begin assessing how adolescents’ emotional insecurity changed as youth aged across the five time points, an intercept-only model was fitted

Level 1:

$$\text{Insecurity}_{ij} = \beta_{0i} + r_{ij}$$

Level 2:

$$\beta_{0i} = \gamma_{00} + u_{0i}$$

This model tests the grand mean of emotional insecurity (γ_{00}) and the amount of individual variability around both the grand mean (u_{0i}) and the person-specific means (r_{ij}). That is, this model shows the extent to which adolescents vary in terms of their emotional insecurity without accounting for

changes over time or any other determinants. All three of these parameters were significant at the $p < .001$ level.

Next, a linear growth model was fitted to determine if emotional insecurity changed over time as a linear function of the youths' age:

Level 1:

$$\text{Insecurity}_{ij} = \beta_{0i} + \beta_{1i}(\text{Age}_{ij} - 8) + r_{ij}$$

Level 2:

$$\beta_{0i} = \gamma_{00} + u_{0i}$$

$$\beta_{1i} = \gamma_{10} + u_{1i}$$

Here, emotional insecurity is modeled using an intercept at the grand mean (γ_{00}) and its average rate of change with age (γ_{10}) while also accounting for the extent to which individuals deviate from the intercept (u_{0i}), rate of change (u_{1i}), and their own mean (r_{ij}). As noted in the general equation above, the age of individual i at each time point j was centered by subtracting 8 (the lowest age value in the study). This model fit significantly better than the intercept-only model, $\text{diff. } \chi^2(3) = 119.3$, $p < .001$, and again showed significant effects for all fixed and random parameters at the $p < .001$ level. The significant random effects suggest that differences in emotional insecurity are explained by more than just the adolescents' age. It also shows that the effects of age on emotional insecurity differ between individuals. Following from this, in the subsequent conditional models, changes to emotional insecurity were modeled linearly using an intercept and age slope, and covariates were added at Levels 1 and 2.

Conditional Models

In the first conditional model (Model A), the intercept and slope were included at Level 1 along with the three time-varying covariates: adolescents' direct exposure to sectarian violence (SectarianV) as measured in the longitudinal survey, political tension between Catholics and Protestants (Tension) as measured in the newspaper coding, and the interaction between these two variables (SectarianV \times Tension). At Level 2, each of the within-person effects is predicted by the relevant person-level means.

Level 1:

$$\begin{aligned} \text{Insecurity}_{ij} = & \beta_{0i} + \beta_{1i}(\text{Age}_{ij} - 8) + \beta_2(\text{SectarianV}_{ij} - \text{SectarianV}_i) \\ & + \beta_3(\text{Tension}_{ij} - \text{Tension}_i) + \beta_4(\text{SectarianV}_{ij} - \text{SectarianV}_i) \\ & \times (\text{Tension}_{ij} - \text{Tension}_i) + r_{ij} \end{aligned}$$

Level 2:

$$\beta_{0i} = \gamma_{00} + \gamma_{01}(\text{SectarianV}_i) + \gamma_{02}(\text{Tension}_i) + \gamma_{03}(\text{Tension}_i) \times (\text{SectarianV}_i) \\ + \gamma_{04}(\text{Ethnicity}_i) + u_{0i}$$

$$\beta_{1i} = \gamma_{10} + \gamma_{11}(\text{SectarianV}_i) + \gamma_{12}(\text{Tension}_i) + \gamma_{13}(\text{Tension}_i) \times (\text{SectarianV}_i) \\ + \gamma_{14}(\text{Ethnicity}_i) + u_{1i}$$

$$\beta_2 = \gamma_{20} + \gamma_{21}(\text{Tension}_i) + \gamma_{22}(\text{Ethnicity}_i)$$

$$\beta_3 = \gamma_{30} + \gamma_{31}(\text{SectarianV}_i) + \gamma_{32}(\text{Ethnicity}_i)$$

$$\beta_4 = \gamma_{40} + \gamma_{41}(\text{Ethnicity}_i)$$

This model also includes the amount of individual variability around the initial status of emotional insecurity and its age slope (u_{0i} and u_{1i}). The model did not converge when including the variance components for exposure to sectarian violence, political tension, and the interaction, so these were omitted from the model. Again, the within-person moderation (γ_{40}) and the cross-level effect of SectarianV_i on Tension_{ij} (γ_{31}) are the two parameters of interest in this model.

The first conditional model (Model A) fit significantly better than the linear growth model, $\text{diff. } \chi^2(16) = 1,192, p < .001$. As shown in Table 6, the level of political tension during each interview did not significantly moderate the within-person relation between sectarian violence exposure and emotional insecurity (γ_{40}), but the cross-level moderation effect was significant ($\gamma_{31} = -.09, SE = .03, p < .01$). This effect indicates that the relation between time-variant political tension and emotional insecurity at each time point varied based on the adolescents' *cumulative* exposure to sectarian violence. For adolescents with higher than average exposure to sectarian violence, the relation between political tension and emotional insecurity was stronger and negative (i.e., more political tension, *less* insecurity). For adolescents with lower than average exposure to sectarian violence, the relation was nearly flat, indicating that macro-level political tension had a minimal impact on emotional insecurity (Figure 5).

The interaction between age and ethnicity also predicted differences in the outcome variable ($\gamma_{14} = .09, SE = .04, p < .05$). At a younger age, Protestant adolescents were more emotionally insecure than Catholic adolescents, but this disparity decreased as they aged. The variance components in this model were significant, $p < .001$, indicating that there is still a substantial amount of deviation around the grand mean of emotional insecurity and its rate of change for emotional insecurity.

The next steps were to see if the two group-specific newspaper variables (ThreatC—Threat to Catholics; ThreatP—Threat to Protestants) had a different impact on adolescents' emotional insecurity over time than general

TABLE 6
MULTILEVEL MODEL ESTIMATES OF CHANGE IN ADOLESCENTS' EMOTIONAL INSECURITY ABOUT THE
COMMUNITY (FULL SAMPLE)

Parameters	Model A: Tension	Model B: ThreatC	Model C: ThreatP
<i>Intercept-only model</i>			
Intercept, β_{0i}	5.43*** (0.08)	5.43*** (0.08)	5.43*** (0.08)
<i>Linear growth model</i>			
Intercept, β_{0i}	6.59*** (0.19)	6.59*** (0.19)	6.59*** (0.19)
Age, β_{1i}	-0.19*** (0.03)	-0.19*** (0.03)	-0.19*** (0.03)
<i>Conditional model</i>			
Initial status, β_{0i}			
Intercept, γ_{00}	6.46*** (1.19)	6.47*** (1.37)	7.09*** (1.16)
SectarianV _m , γ_{01}	-0.22 (0.42)	0.19 (0.46)	0.22 (0.36)
MACRO _m , γ_{02}	-0.17 (0.76)	-0.71 (1.20)	-1.59 (1.15)
SectarianV _m × MACRO _m , γ_{03}	0.27 (0.28)	0.03 (0.43)	-0.02 (0.38)
Ethnicity, γ_{04}	-1.08*** (0.27)	-0.80* (0.36)	-0.76* (0.34)
Age, β_{1i}			
Intercept, γ_{10}	-0.10 (0.24)	-0.12 (0.23)	-0.20 (0.19)
SectarianV _m , γ_{11}	0.09 ^t (0.05)	-0.01 (0.06)	0.00 (0.05)
MACRO _m , γ_{12}	-0.05 (0.15)	0.02 (0.20)	0.11 (0.18)
SectarianV _m × MACRO _m , γ_{13}	-0.06 ^t (0.03)	0.00 (0.06)	0.00 (0.06)
Ethnicity, γ_{14}	0.09* (0.04)	0.04 (0.06)	0.04 (0.06)
SectarianV, β_2			
Intercept, γ_{20}	0.06 (0.17)	0.10 (0.25)	0.09 (0.19)
MACRO _m , γ_{21}	-0.01 (0.12)	-0.05 (0.24)	-0.04 (0.21)
Ethnicity, γ_{22}	0.05 ^t (0.03)	0.04 (0.03)	0.04 (0.03)
MACRO, β_3			
Intercept, γ_{30}	-0.20 (0.28)	-1.19** (0.41)	-1.28*** (0.40)
SectarianV _m , γ_{31}	-0.09** (0.03)	-0.04 (0.05)	-0.12* (0.05)
Ethnicity, γ_{32}	0.30 (0.35)	0.98 ^t (0.54)	1.00* (0.52)
SectarianV × MACRO, β_4			
Intercept, γ_{40}	-0.07 (0.13)	0.12 (0.16)	0.11 (0.14)
Ethnicity, γ_{41}	-0.01 (0.15)	-0.33 (0.20)	-0.34* (0.17)

Notes. $N = 754$. MACRO is a placeholder that represents one of the three macro-level variables (Tension, ThreatC, ThreatP). Standard errors are reported in parenthesis next to coefficient estimates. The subscript i indicates a random variable. The subscript m indicates a person-level mean.

SectarianV = exposure to sectarian violence; Tension = political tension between Catholics and Protestants; ThreatC = threat to Catholics; ThreatP = threat to Protestants.

^t $p < .10$.

* $p < .05$.

** $p < .01$.

*** $p < .001$.

political tension between groups (Tension). As these analyses were conducted using the same sample of participants, it was not necessary to refit the unconditional models. The conditional model described above (Model A) was fitted again except that Tension was replaced with ThreatC (Model B). This model again fit better than the unconditional linear growth model, $\text{diff. } \chi^2(6) = 1,188.1, p < .001$. This time, neither the within-person moderation effect nor the cross-level moderation effect was significant, and none of

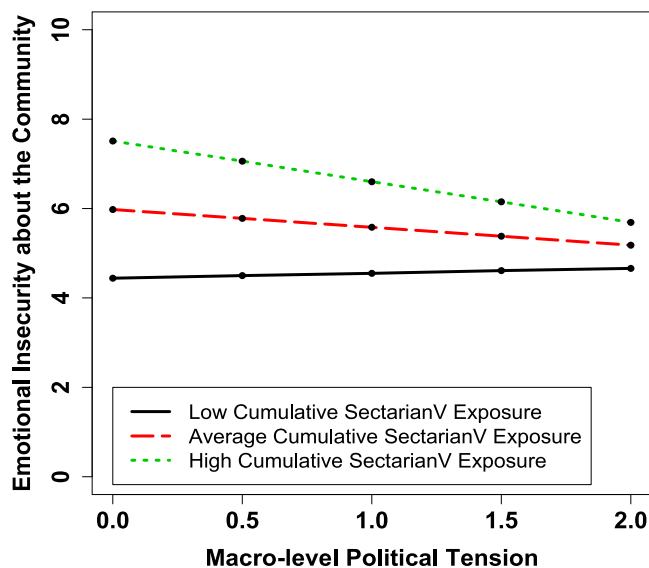


FIGURE 5.—The cross-level moderation effect on all adolescents in the sample, illustrating the relation between political tension in the macrosystem and adolescents' emotional insecurity at different levels of cumulative exposure to sectarian violence. This figure indicates that the relation between political tension and emotional insecurity is stronger for adolescents exposed to higher than average levels of sectarian violence (more macro-level tension, less emotional insecurity).

the age effects was significant (Table 6, Model B). The only significant predictors were the ethnicity main effect and the ThreatC main effect. These show that Protestants were more emotionally insecure overall ($\gamma_{04} = -.80$, $SE = .36$, $p < .05$) and that adolescents were generally less emotionally insecure during periods of high macro-level threat toward Catholics, regardless of ethnicity ($\gamma_{30} = -1.19$, $SE = .41$, $p < .01$).

The conditional model was analyzed for a third time by replacing the newspaper variable with ThreatP (Table 6, Model C). The model still fits significantly better than the unconditional linear growth model, $\text{diff. } \chi^2(6) = 1,210.8$, $p < .001$, and again the within-person moderation effect and all age effects were nonsignificant. This time the cross-level moderation effect was significant ($\gamma_{31} = -.12$, $SE = .05$, $p < .05$). Similar to the political tension cross-effect (Figure 5), the ThreatP cross-effect indicates a negative within-person relation between macro-level threat to Protestants and emotional insecurity (i.e., more threat to Protestants, less insecurity), that was stronger for those with more cumulative exposure to sectarian violence than those with less exposure. In particular, the 3-way interaction between ethnicity, direct exposure to sectarian violence, and macro-level threat to Protestants was significant ($\gamma_{41} = -.34$, $SE = .07$, $p < .05$). This finding shows a positive within-person relation between sectarian violence exposure and emotional insecurity for all adolescents (i.e., more exposure, more insecurity). During

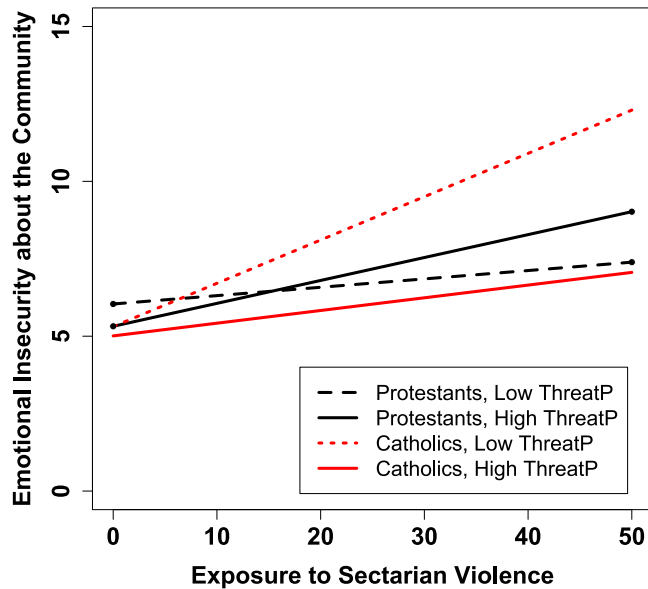


FIGURE 6.—The within-person relation between exposure to sectarian violence and emotional insecurity about the community at different levels of threat to Protestants (ThreatP) and ethnicity. Emotional insecurity increases with direct exposure to sectarian violence for both ethnicities. For Catholic adolescents, this relation becomes weaker at high levels of ThreatP. For Protestant adolescents, this relation becomes stronger at high levels of ThreatP.

periods of high threat to Protestants, the relation between exposure to sectarian violence and emotional insecurity was stronger for Protestants and weaker for Catholics. That is, a macrosystem characterized by high threat to Protestants appeared to have an exacerbating impact for Protestants' emotional insecurity and a buffering impact for Catholics' emotional insecurity (see Figure 6).

In summary, the prior analyses revealed the following. First, adolescents responded differently based on their *cumulative* exposure to sectarian violence. For adolescents directly exposed to higher than average levels of sectarian violence (SectarianV), there was a negative relation between political tension and emotional insecurity (i.e., more political tension, less emotional insecurity). For adolescents exposed to lower than average levels of sectarian violence, the impact of political tension on emotional insecurity was minimal. This trend was also found when looking at threat to Protestants (ThreatP) in the macrosystem but not threat to Catholics (ThreatC). Second, there was a positive within-person relation between direct exposure to sectarian violence and emotional insecurity (i.e., more exposure, more insecurity). During periods of high macro-level threat to Protestants (ThreatP), this relation was exacerbated for Protestants and weaker for Catholics. This finding was not present during periods of high macro-level threat to Catholics (ThreatC).

Because ethnicity was such a strong predictor of variation in Model C, additional analyses were conducted in order to clarify the interpretation. The same models were run again using two separate samples—one with Catholics and one with Protestants.

Multilevel Models—Catholic Sample

The next analyses were conducted on a sample of only Catholics. As the analysis draws from a different sample than above, separate tables are included to show the means and standard deviations for each variable (Table 7). Again, the mean exposure to sectarian violence during Wave 3 is nearly double that of the other waves, and the standard deviations for this variable indicate a wide range or exposure. As in the full sample, Catholics’ exposure to sectarian violence and emotional insecurity were positively skewed. 62.9% reported no exposure to sectarian violence in the last 3 months, and 67.2% of mothers reporting that their children showed low levels of emotional insecurity about the community.

The full correlation table for Catholic participants is available in the Supporting Information Appendix C (see Supporting Information Table C2). Again, macro-level threat to Catholics and threat to Protestants correlated strongly at all waves ($p < .001$). The correlations between threat to Catholics and exposure to sectarian violence were nonsignificant at each wave, and the correlations between threat to Protestants and exposure to sectarian violence were significant only at Waves 1 and 5 (Wave 1: $r = -.16$, $p = .01$; Wave 5: $r = -.42$, $p < .001$). A collinearity test of the three variables in both waves showed that all VIFs were under 1.6.

As these analyses used a different sample than the analyses above, the unconditional models had to be refitted. First, the intercept-only model was fitted to show how the emotional insecurity of Catholic adolescents varied around the grand mean (see Table 8). Next, the intercept-only model was compared with linear growth model to see if Catholics’ emotional insecurity

TABLE 7
MEANS AND STANDARD DEVIATIONS FOR STUDY VARIABLES (CATHOLICS)

Wave	<i>n</i>	SectarianV <i>M (SD)</i>	Tension <i>M (SD)</i>	ThreatC <i>M (SD)</i>	ThreatP <i>M (SD)</i>	Insecurity <i>M (SD)</i>
1	269	3.28 (6.07)	1.50 (.09)	0.91 (.05)	0.79 (.04)	5.40 (2.65)
2	203	3.23 (7.85)	1.39 (.04)	0.96 (.04)	0.71 (.04)	5.34 (2.72)
3	290	6.54 (10.50)	1.29 (.00)	1.03 (.00)	0.91 (.00)	5.19 (2.38)
4	250	3.62 (7.42)	1.81 (.36)	1.49 (.08)	1.27 (.09)	5.31 (2.76)
5	210	3.12 (7.56)	1.91 (.06)	1.40 (.32)	1.32 (.02)	4.47 (1.18)

Note. The descriptive statistics for only those survey participants who identified as Catholic are included. Insecurity = emotional insecurity about the community; *M* = mean; *SD* = standard deviation, SectarianV = exposure to sectarian violence; Tension = macro-level political tension; ThreatC = macro-level threat to Catholics; ThreatP = macro-level threat to Protestants.

TABLE 8
MULTILEVEL MODEL ESTIMATES OF CHANGE IN ADOLESCENTS' EMOTIONAL INSECURITY ABOUT THE
COMMUNITY (CATHOLICS)

Parameters	Model D: ThreatC	Model E: ThreatP
<i>Unconditional Model 1</i>		
Intercept, β_{0i}	5.13*** (0.10)	5.13*** (0.10)
<i>Unconditional Model 2</i>		
Intercept, β_{0i}	5.78*** (0.26)	5.78*** (0.26)
Age, β_{1i}	-0.11** (0.04)	-0.11** (0.04)
<i>Conditional model</i>		
Initial status, β_{0i}		
Intercept, γ_{00}	7.07** (2.48)	6.43** (2.04)
SectarianV _m , γ_{01}	1.02** (0.38)	0.92** (0.34)
MACRO _m , γ_{02}	-1.75 (2.16)	-1.42 (1.92)
SectarianV _m × MACRO _m , γ_{03}	-0.81* (0.32)	-0.84* (0.33)
Age, β_{1i}		
Intercept, γ_{10}	-0.32 (0.34)	-0.14 (0.31)
SectarianV _m , γ_{11}	-0.14* (0.06)	-0.11* (0.05)
MACRO _m , γ_{12}	0.18 (0.29)	0.04 (0.29)
SectarianV _m × MACRO _m , γ_{13}	0.13* (0.05)	0.13** (0.05)
SectarianV, β_{2i}		
Intercept, γ_{20}	0.47* (0.19)	0.49** (0.16)
MACRO _m , γ_{21}	-0.32 ^t (0.17)	-0.41** (0.16)
MACRO, β_3		
Intercept, γ_{30}	0.34 (0.17)	0.18 (0.31)
SectarianV _m , γ_{31}	-0.25*** (0.07)	-0.28*** (0.07)
SectarianV × MACRO, β_4		
Intercept, γ_{40}	-0.15 ^t (0.08)	-0.23*** (0.07)

Notes. $N = 295$ Catholics. MACRO is a placeholder that represents one of the two macro-level variables used to measure group threat (ThreatC, ThreatP). Standard errors are reported in parenthesis next to coefficient estimates. The subscript i indicates a random variable. The subscript m indicates the person-mean.

SectarianV = exposure to sectarian violence; ThreatC = threat to Catholics; ThreatP = threat to Protestants.

^t $p < .10$.

* $p < .05$.

** $p < .01$.

*** $p < .001$.

changed as a linear function of their age. The linear growth model fit significantly better than the intercept-only model, $\text{diff. } \chi^2(3) = 20.5, p < .001$. Individual variability around the grand mean and person-means of emotional insecurity was still significant at the $p < .001$ level, and individual variability around the rate of change was significant at the $p < .05$ level. Thus, changes to emotional insecurity with time were again modeled using an intercept and age slope in addition to the Levels 1 and 2 covariates.

The only difference between the conditional models for the full sample (Table 6) and the Catholic sample (Table 8) is that in the latter, ethnicity was removed as a Level 2 control. Also, unlike the previous

analyses, the Catholic sample was able to accommodate an additional variance component. These models included the extent to which individuals deviated around the intercept of emotional insecurity (u_{0i}), its rate of change (u_{1i}), and exposure to sectarian violence (u_{2i}). The variance components for the newspaper variables and the interaction term were again omitted in order to facilitate convergence of the model. The Level 1 and 2 equations are as follows:

Level 1:

$$\begin{aligned} \text{Insecurity}_{ij} = & \beta_{0i} + \beta_{1i}(\text{Age}_{ij} - 8) + \beta_2(\text{SectarianV}_{ij} - \text{SectarianV}_i) \\ & + \beta_3(\text{Threat}_{ij} - \text{Threat}_i) + \beta_4(\text{SectarianV}_{ij} - \text{SectarianV}_i) \\ & \times (\text{Threat}_{ij} - \text{Threat}_i) + r_{ij} \end{aligned}$$

Level 2:

$$\begin{aligned} \beta_{0i} = & \gamma_{00} + \gamma_{01}(\text{SectarianV}_i) + \gamma_{02}(\text{Threat}_i) + \gamma_{03}(\text{Threat}_i) \times (\text{SectarianV}_i) \\ & + u_{0i} \\ \beta_{1i} = & \gamma_{10} + \gamma_{11}(\text{SectarianV}_i) + \gamma_{12}(\text{Threat}_i) + \gamma_{13}(\text{Threat}_i) \times (\text{SectarianV}_i) + u_{1i} \\ \beta_{2i} = & \gamma_{20} + \gamma_{21}(\text{Threat}_i) + u_{2i} \\ \beta_3 = & \gamma_{30} + \gamma_{31}(\text{SectarianV}_i) \\ \beta_4 = & \gamma_{40} \end{aligned}$$

The threat to Catholics (ThreatC) conditional model, Model D, diff. $\chi^2(13) = 696.2$, $p < .001$, and the threat to Protestants (ThreatP) conditional model, Model E, diff. $\chi^2(13) = 706.4$, $p < .001$, both fit significantly better than the linear growth model.

In these models, the cross-level moderation effects were significant (ThreatC: $\gamma_{31} = -.25$, $SE = .07$, $p < .001$; ThreatP: $\gamma_{31} = -.28$, $SE = .07$, $p < .001$) and the within-person moderation effects were either significant or marginally so (ThreatC: $\gamma_{40} = -.15$, $SE = .08$, $p = .07$; ThreatP: $\gamma_{40} = -.23$, $SE = .07$, $p < .001$). Both cross-level effects indicate a *negative* relation between macro-level threat and emotional insecurity for Catholic adolescents who have been exposed to higher than average levels of sectarian violence, and a *positive* relation between macro-level threat and emotional insecurity for Catholic adolescents who have been exposed to lower than average levels of sectarian violence. In other words, during periods of high threat toward either group, Catholics who had more direct experience with sectarian violence (higher cumulative SectarianV) were more comfortable in the communities (lower emotional insecurity), and Catholics who had less direct experience with sectarian violence (lower cumulative SectarianV)

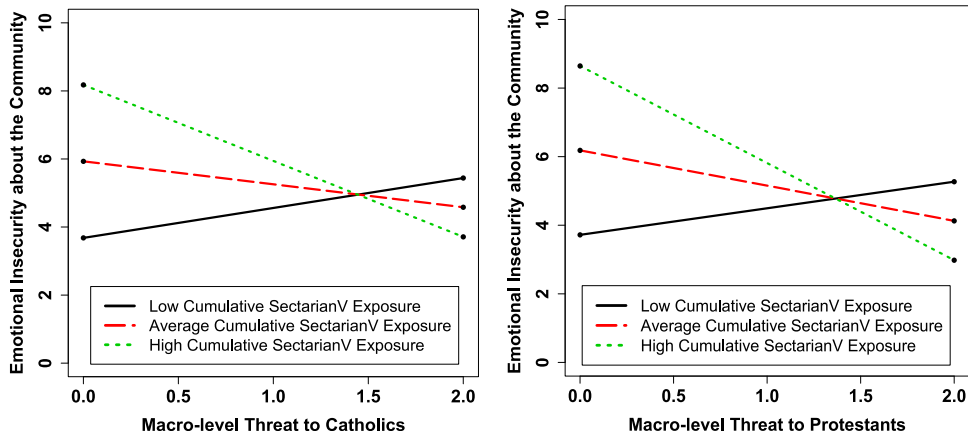


FIGURE 7.—The cross-level moderation effect on Catholic adolescents. For Catholic adolescents with lower than average exposure to sectarian violence, the relation between threat in the macrosystem and emotional insecurity is positive (more threat, more insecurity). For Catholic adolescents with higher than average exposure to sectarian violence, this relation is negative (more threat, less insecurity). The effects are the same when using the threat to Catholics newspaper variable (ThreatC, $p < .001$) or the threat to Protestants newspaper variable (ThreatP, $p < .001$).

were less comfortable in their communities (higher emotional insecurity; Figure 7). Regarding the within-person moderations, the relation between sectarian violence exposure and emotional insecurity was positive, and this relation was *weaker* during periods of high macro-level threat toward either Catholics or Protestants. Overall, Catholics appeared to be more comfortable in their communities during periods of high threat (Figure 8).

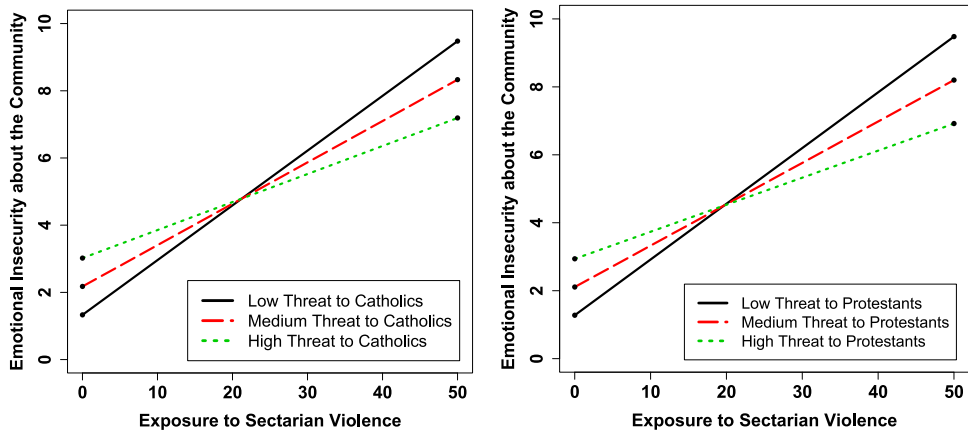


FIGURE 8.—The within-person moderation effect on Catholic adolescents. Emotional insecurity increases with direct exposure to sectarian violence for. This relation is *weaker* at high levels of threat in the macrosystem. The analyses show the same pattern when using the threat to Catholics newspaper variable (ThreatC, $p = .07$) or the threat to Protestants newspaper variable (ThreatP, $p < .001$).

The three-way interactions among age, macro-level threat, and exposure to sectarian violence were also significant (ThreatC: $\gamma_{13} = .13$, $SE = .05$, $p < .05$; ThreatP: $\gamma_{13} = .13$, $SE = .05$, $p < .05$). Overall, emotional insecurity in the community decreased with age. This decrease was steeper for those with higher than average levels of exposure to sectarian violence—particularly those who were also interviewed during periods of higher than average threat in the political macrosystem. Despite the steeper decrease, these adolescents (with more cumulative sectarian violence exposure) remained more emotionally insecure than their peers across age. The covariance of age and sectarian violence exposure was nonsignificant, but the remaining variance and covariance components for the intercept, age, and sectarian violence exposure were all significant, suggesting that other predictors are still needed to understand the variability in emotional insecurity.

Multilevel Models—Protestant Sample

The final models use the same process as in the last section to examine the effects of direct exposure to sectarian violence, macro-level threat to Catholics (ThreatC—Model F) and macro-level threat to Protestants (ThreatP—Model G) on the emotional insecurity of *Protestant* adolescents. The means and standard deviations for the variables in this sample are shown in Table 9. As before, exposure to sectarian violence was nearly double for Wave 3, and its standard deviations were high at all waves. Most Protestants reported no exposure to sectarian violence (60.9%) and low levels of emotional insecurity in the community (58.6%), but the remaining participants showed a wide variation in responses. Correlations were again run for all the study variables, and the full correlation table is available in the Supporting Information Appendix C (see Supporting Information Table C3). Like the other samples, threat to Catholics (ThreatC) and threat to Protestants (threatP) correlated highly at Waves 1, 2, and 4 ($p < .001$) but this time they did not correlate at Wave 5. These two newspaper variables correlated with SectarianV at two of the five waves (ThreatC and

TABLE 9
MEANS AND STANDARD DEVIATIONS FOR STUDY VARIABLES (PROTESTANTS)

Wave	<i>n</i>	SectarianV <i>M (SD)</i>	Tension <i>M (SD)</i>	ThreatC <i>M (SD)</i>	ThreatP <i>M (SD)</i>	Insecurity <i>M (SD)</i>
1	416	2.81 (5.50)	1.51 (.08)	0.90 (.05)	0.80 (.02)	6.17 (3.58)
2	359	2.39 (5.88)	1.34 (.05)	0.94 (.05)	0.69 (.05)	6.16 (3.29)
3	480	4.39 (8.04)	1.29 (.00)	1.03 (.00)	0.91 (.00)	5.42 (2.67)
4	381	2.48 (6.49)	1.68 (.27)	1.47 (.06)	1.24 (.06)	5.38 (2.83)
5	383	2.72 (6.34)	1.93 (.07)	1.40 (.04)	1.30 (.02)	4.69 (1.91)

Note. The descriptive statistics for only those survey participants who identified as Protestant are included. Insecurity = emotional insecurity about the community; *M* = mean; *SD* = standard deviation; SectarianV = exposure to sectarian violence; Tension = macro-level political tension; ThreatC = macro-level threat to Catholics; ThreatP = macro-level threat to Protestants.

SectarianV—Wave 2: $r = .21, p < .001$; Wave 5: $r = -.21, p < .001$; ThreatP and SectarianV—Wave 2: $r = .21, p < .001$; Wave 5: $r = .19, p < .001$). Collinearity tests again revealed that all of the VIFs for the outcome variable, covariates, and interaction terms were under 1.60, so multicollinearity was unlikely to be an issue.

First the intercept-only model was fitted to show how Protestant adolescents deviated around the grand mean of emotional insecurity. Next, the intercept-only model was compared to a linear growth model to see if Protestants' emotional insecurity changed as a linear function of their age. Although the linear growth model fit significantly better than the intercept-only model, $\text{diff. } \chi^2(3) = 20.5, p < .001$, it did not converge when the variance components for both the intercept and slope were included. To facilitate convergence, the age slope was fixed. This change in the variance components was the only difference between the conditional models for the Protestant sample and the conditional models for the Catholic sample. Whereas the Catholic models converged when the variance components for the intercept, slope, and sectarian violence exposure were included, the Protestants models could only converge once the variance components for the slope and sectarian violence exposure were removed from the model. The resulting equations for Levels 1 and 2 are below:

Level 1:

$$\begin{aligned} \text{Insecurity}_{ij} = & \beta_{0i} + \beta_i(\text{Age}_{ij} - 8) + \beta_2(\text{SectarianV}_{ij} - \text{SectarianV}_i) \\ & + \beta_3(\text{Threat}_{ij} - \text{Threat}_i) + \beta_4(\text{SectarianV}_{ij} \\ & - \text{SectarianV}_i)(\text{Threat}_{ij} - \text{Threat}_i) + r_{ij} \end{aligned}$$

Level 2:

$$\begin{aligned} \beta_{0i} = & \gamma_{00} + \gamma_{01}(\text{SectarianV}_i) + \gamma_{02}(\text{Threat}_i) + \gamma_{03}(\text{Threat}_i)(\text{SectarianV}_i) + u_{0i} \\ \beta_1 = & \gamma_{10} + \gamma_{11}(\text{SectarianV}_i) + \gamma_{12}(\text{Threat}_i) + \gamma_{13}(\text{Threat}_i)(\text{SectarianV}_i) \\ \beta_2 = & \gamma_{20} + \gamma_{21}(\text{Threat}_i) \\ \beta_3 = & \gamma_{30} + \gamma_{31}(\text{SectarianV}_i) \\ \beta_4 = & \gamma_{40} \end{aligned}$$

Although these models fit significantly better than the intercept-only and linear growth models, ThreatC: $\text{diff. } \chi^2(11) = 556.2, p < .001$; ThreatP: $\text{diff. } \chi^2(11) = 550.3, p < .001$, the problems with convergence suggest that these models did not fit the data quite as well as they fit the data for Catholics. This poor fit must be considered when interpreting the results.

For the sample of Protestant adolescents, the cross-level moderation effect was significant for the ThreatC model ($\gamma_{31} = .17, SE = .06, p < .01$) but not the ThreatP model (Table 10), and the direction of this effect differs from the sample of Catholic adolescents. Here, the effect indicates a negative

TABLE 10
MULTILEVEL MODEL ESTIMATES OF CHANGE IN ADOLESCENTS' EMOTIONAL INSECURITY ABOUT THE
COMMUNITY (PROTESTANTS)

Parameters	Model F: ThreatC	Model G: ThreatP
<i>Unconditional Model 1</i>		
Intercept, β_{0i}	5.58*** (0.10)	5.58*** (0.10)
<i>Unconditional Model 2</i>		
Intercept, β_{0i}	6.95*** (0.24)	6.95*** (0.24)
Age, β_1	-0.22*** (0.03)	-0.22*** (0.03)
<i>Conditional model</i>		
Initial status, β_{0i}		
Intercept, γ_{00}	8.01*** (1.67)	8.25*** (1.36)
SectarianV _m , γ_{01}	-0.93** (0.37)	-0.50 (0.32)
MACRO _m , γ_{02}	-2.44 [†] (1.42)	-3.08 (1.28)
SectarianV _m × MACRO _m , γ_{03}	1.16*** (0.32)	0.86** (0.31)
Age, β_1		
Intercept, γ_{10}	-0.37 (0.32)	-0.38 (0.26)
SectarianV _m , γ_{11}	0.14** (0.05)	0.10* (0.05)
MACRO _m , γ_{12}	0.29 (0.27)	0.34 (0.25)
SectarianV _m × MACRO _m , γ_{13}	-0.15*** (0.04)	-0.12** (0.04)
SectarianV, β_2		
Intercept, γ_{20}	-0.22 (0.31)	-0.18 (0.24)
MACRO _m , γ_{21}	0.24 (0.29)	0.23 (0.26)
MACRO, β_3		
Intercept, γ_{30}	-1.74*** (0.38)	-1.68*** (0.34)
SectarianV _m , γ_{31}	0.17** (0.06)	0.06 (0.07)
SectarianV × MACRO, β_4		
Intercept, γ_{40}	0.15 (0.16)	0.15 (0.14)

Note. $N = 465$ Protestants. MACRO is a placeholder that represents one of the two macro-level variables used to measure group threat (ThreatC, ThreatP). Standard errors are reported in parenthesis next to coefficient estimates. The subscript i indicates a random variable. The subscript m indicates the person-mean.

SectarianV = exposure to sectarian violence; ThreatC = threat to Catholics; ThreatP = threat to Protestants.

[†] $p < .10$.

* $p < .05$.

** $p < .01$.

*** $p < .001$.

within-person relation between macro-level threat to Catholics and emotional insecurity in the community (i.e., more threat to Catholics, less emotional insecurity for Protestants). Yet, this relation was *weaker* among those exposed to higher than average levels of sectarian violence (Figure 9). That is, during periods of threat to Catholics, Protestant adolescents with higher than average levels of sectarian violence exposure remained more emotionally insecure than Protestants with lower than average exposure.

Unlike the sample of Catholic adolescents, both of the within-person moderation effects were nonsignificant. For Catholics, the relation between direct exposure to sectarian violence and emotional insecurity varied at different levels of threat in the macrosystem. For Protestant adolescents, levels

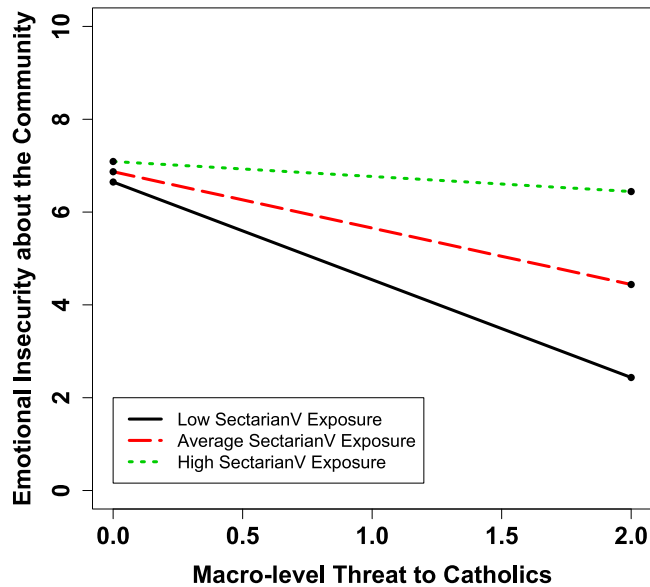


FIGURE 9.—The cross-level moderation effect on Protestant adolescents. The relation between threat to Catholics in the macrosystem (ThreatC) and emotional insecurity is stronger for Protestant adolescents with lower than average exposure to sectarian violence (more threat to Catholics, less insecurity). This cross-level effect was not found when looking at threat to Protestants in the macrosystem (ThreatP).

of macro-level threat did not significantly moderate the relation between direct exposure to violence and emotional insecurity. Finally, the 3-way age effect was again significant for both models (ThreatC: $\gamma_{13} = -.15$, $SE = .04$, $p < .001$; ThreatP: $\gamma_{13} = -.12$, $SE = .04$, $p < .01$). As with Catholic adolescents, the decrease in Protestants' emotional insecurity with age was steeper for those exposed to higher than average levels of sectarian violence who were also interviewed during periods of higher than average threat.

Discussion

The goal of the current study was to test the extent to which forces outside of the individual's immediate environment—such as a tense or threatening political climate—may negatively impact their psychological functioning and wellbeing. Focusing on the context of post-accord Northern Ireland, this question was answered by linking coded newspaper articles to individual surveys with mothers and children in Belfast across a 5-year period. The findings show that adolescents growing up in the most socially deprived areas of Belfast responded to sectarian community violence differently depending on the events happening in society at the time. For these adolescents, direct exposure to sectarian violence resulted in higher

emotional insecurity about their neighborhoods. We expected that the positive link between violence exposure and emotional insecurity would be accentuated during periods of both high intergroup tension and high in-group threat. These macro-level effects were much more complicated, however, with notable differences between tension and threat, and different effects on Catholics and Protestants.

Interpretation of Results

The first macro-level newspaper variable measured the amount of political tension between Catholics and Protestants at the time of each individual's interview. The events coded as politically tense covered a wide spectrum, including the activity of sectarian gangs in the communities, organized paramilitary activity, ongoing investigations about crimes committed during the height of the Troubles, riots during the parading season, delegitimization of politicians, and criticism of the policing and justice system. Accounting for this variable in analyses using the full sample of participants revealed distinct differences between adolescents who were more accustomed to sectarian violence in their communities and those who were not. During periods of higher political tension, those who had more total exposure to violence were *more emotionally secure*, while those with less total exposure were largely unaffected—regardless of their group identity. This finding was unexpected, though a closer look may offer some potential explanations.

The majority of adolescents participating in the study reported that they were not directly exposed to any sectarian violence at all in the past 3 months. The remaining adolescents reported a wider range of exposure, witnessing the various items anywhere from once in the last 3 months to every day. For those who had no direct experience with sectarian violence, it is reasonable to expect that increased messages of tension would minimally impact their wellbeing. It is also reasonable to expect that those who had more experience with sectarian violence would respond differently to political tension—either because they were more attuned to its potential impact on their lives or because it coincided with other factors that impacted them directly. Still, additional research may be needed to understand how this group became *more* emotionally secure during periods of tension. One possible explanation is that these youth may have had higher rates of participation in sectarian antisocial behavior. This possibility is supported by information from the newspapers.

Many of the news articles from this time period noted the ways in which youth from these communities were often at the forefront of sectarian antisocial behavior—engaging in recreational rioting, throwing petrol bombs at cars or homes, and sometimes getting caught up in the formal paramilitary networks (Archer, 2010; “Dissident threat,” 2011; “Extra police,” 2010; “It’s the lost generation,” 2010; McCrory, 2010; Morrison, 2010). According

to the articles, these activities sometimes included youth as young as 9 or 10. In this way, some adolescents in the study may not have simply been “exposed” to sectarian violence but an active part of it. During the parading riots of 2010, one article detailed the adolescents’ participation and the thrill they seemed to get from it:

Brandishing a stick, a young boy, aged around nine, pulled a hoodie over his head to cover his face and began shouting expletives at police. These officers were kitted out in full riot gear, with batons, shields and some armed with baton rounds, but that did not extinguish the boy’s bravado in front of them. A group of young males took up position on the roof of commercial premises and began throwing petrol bombs, bricks and bottles down at police, oblivious to the fact that they were also striking members of their own community... Older residents said they were fed up with the violence, while younger ones loved the entertainment. “Mum, can I stay out for another half hour,” one asked his mother. “Okay, just don’t get arrested,” she replied (“Brandishing,” 2010).

Another journalist wrote that “a new generation of ‘out of control’ children and youths are at the frontline of sectarian violence which has gripped interface areas of Belfast” (“It’s the lost generation,” 2010). According to some, the parading season had been hijacked by adolescents “using text messaging and social networking sites to encourage friends to join the riots ‘for the craic’” (“It’s the lost generation,” 2010).

The general tone of moral panic from these new reports does not provide a sufficient understanding of youth involvement in these activities or the meaning they get from it. There has, however, been research in Northern Ireland that more rigorously documents adolescents’ involvement in antisocial behavior and their reasoning behind it. Dwyer et al. (2013) found high rates of participation in antisocial behavior among youth, particularly in the form of sectarian rioting, property damage, throwing objects at people, and lighting fires in public places. Examining the reasons underlying this behavior, McEvoy-Levy (2006) points to the political exclusion of youth at both the local and state levels. She argues that, for many youths, participation in rioting and other forms of sectarian behavior is a way to demand agency in response to feelings of invisibility and economic marginality. Research with Palestinian youth has noted that this kind of engagement in conflict may actually be a protective factor against negative outcomes, particularly during periods of high-intensity violence (Barber, 2009; Qouta, Punamäki, & El Sarraj, 2008). Being mobilized to take action may help youth find efficacy, meaning, and hope in the sectarianism they are exposed to. To bring it back to the current study, if higher levels of inter-group political tension did imply more youth participation in sectarian violence, and if this participation brought them agency or meaning as noted in prior research, then this may explain the decrease in emotional insecurity about the community.

The other two macro-level newspaper variables used in this study measured the level of threat toward Catholics and toward Protestants at the time of each interview. Although these variables were conceptually distinct and comprised different news articles, the analyses revealed few differences between them. They fluctuated along with each other, had a similar—though not identical—impact on adolescents’ emotional insecurity, and in the latter two waves they were largely characterized by the same events. Yet, these variables depicting high threat had a very different impact on Catholic adolescents than on Protestants. In analyses using the full sample, interactions between ethnicity and the time-varying covariates were the strongest predictors of differences in emotional insecurity. Follow-up analyses using Catholic-only and Protestant-only samples clarified these effects. They showed that during periods in which the political climate was particularly threatening (toward either group but especially toward Protestants), the within-person relation between sectarian violence exposure and emotional insecurity was weaker for Catholics compared to periods in which the climate was less threatening. This suggests that they were slightly more secure during periods of high threat. This moderation was not present for Protestants. Further, at high levels of threat (toward either group), Catholics with little to no violence exposure became more insecure, while Catholics with higher than average exposure to violence became more secure. On the other hand, Protestants with little to no violence exposure became more secure during periods of high macro-level threat toward Catholics but not during periods of high macro-level threat toward Protestants. Understanding these differences in the adolescents’ response to violence exposure during these periods requires a closer look at the particular events taking place and the ways in which threat was coded in the news articles.

A qualitative analysis of the newspaper coding revealed that high threat to Catholics *and* high threat to Protestants were largely characterized by the increase in dissident republican attacks—particularly in the latter two waves when these attacks had reached unprecedented levels (Horgan & Morrison, 2011; McAleese, 2011). The groups waging these attacks (Real IRA, Continuity IRA, Óglaigh na hÉireann) consisted of Irish Catholics who reject the peace agreements, oppose British rule, and fight for the region to rejoin with the Republic of Ireland. These attacks happened in public places through either the detonation of bombs or the placement of hoax devices in order to induce fear and disrupt routine activity by creating ongoing security alerts (Horgan & Morrison, 2011). The fear that these attacks caused, combined with the bombers’ violent opposition to the ideologies espoused by Protestants and their targeting of the police—a historically Protestant institution—offer a straightforward explanation for why these events were coded as threatening to Protestants. Despite the activity from dissident republicans during this period and their violent opposition to those who do not share their ideology, the relation between direct exposure to sectarian violence and emotional insecurity was not notably intensified for Protestants.

The only finding that pertained directly to Protestant adolescents showed differences based on their cumulative levels of sectarian violence exposure. Protestants with higher than average levels of sectarian violence exposure were more emotionally insecure than Protestants who had no experience at all with sectarianism—particularly during periods of high threat toward Catholics. A possible explanation is that youth with more violence exposure may be more attuned to societal events than their peers and thus more aware of the potential implications for their community.

The effect of these threats on Catholic adolescents merits a bit more examination. The ongoing aim of the dissident republican groups waging these attacks is to de-normalize and de-stabilize the power structures in Northern Ireland (Bean, 2012). Following the peace agreements, these power structures had increased representation from the nationalist and republican communities (e.g., through power-sharing and cross-community policing), which made cooperating Catholics as much of a target as Protestants (Whiting, 2015). This motive was seen in action when two police officers were killed during this period, both of them Catholics (Dinnen, 2011). Not only did the activity of these groups put Catholics in physical danger, but it also risked the political gains that the Catholic community had made since the peace agreements, increased the likelihood of retaliation from the *loyalist* dissident groups, and made Catholic youth vulnerable to recruitment, propaganda, and violent ideologies. Thus, for the university students coding these articles, it would make sense for these events to be viewed as threatening to Catholics. Yet, these events did not accentuate the emotional insecurity of the Catholic adolescents who were surveyed.

For the Catholic adolescents living in the most underserved areas of Belfast, exposure to sectarian violence had a weaker impact on their emotional insecurity during these periods of high threat. That is, when republican paramilitaries were more active, they were more secure about their communities—particularly those who were more accustomed to sectarian violence. These effects could be partially understood by examining the protective role that these paramilitaries have often played in communities where sectarian violence is prominent. To achieve their aims, the paramilitaries do not just organize insurgent attacks, but they also engage in a form of political campaigning to win over the support of those in the nationalist community (Bean, 2012). One way that they have done this is by taking advantage of the policing vacuum in the poorest communities (Topping & Byrne, 2012). As shown through the *ineffective policing and justice* theme described above and noted in prior research, many in these neighborhoods feel that the police service has failed to address their fears about ongoing crime and sectarian violence (Byrne et al., 2005; Byrne & Monaghan, 2008; Topping, 2008). Paramilitary groups have gained support by patrolling these neighborhoods and enforcing their own justice at the local level (Topping & Byrne, 2012). One of the news articles from this period covered a report on paramilitary policing, in which community members

expressed their support. One interviewee was quoted: “There’s a palate out there for that (paramilitary justice) because people are getting so frustrated (at the lack of state policing). They’re saying: “I don’t care who hits them (criminals) as long as somebody’s hitting them, stopping it (crime)” (“Terrorists,” 2011). The lower levels of sectarian crime reported to the police during Waves 4 and 5 may also indicate an increase in paramilitary policing and distrust of the police service (Northern Ireland Statistics, 2017). In sum, both the news reports and prior research support the notion that policing by republican groups was active during this time period, which may have led the Catholic adolescents who were surveyed to feel more emotionally secure in their communities than they did when the policing was absent.

Research on youth perceptions of paramilitary violence indicated that young people in Northern Ireland are knowledgeable about paramilitary activity, demonstrate a “multi-levelled awareness” of the reasons for engaging in it, and often struggle with the “rights and wrongs of paramilitary involvement” (Muldoon, McLaughlin, Rougier, & Trew, 2008, p. 692). Rather than rejecting them outright, many young people view them as a complex phenomenon, understand their mission to address group-level injustices and marginalization, and perceive them as having high status in communities (Muldoon et al., 2008). Following from this, if the increased activity from dissident republicans also included an increase in civil policing, it could explain why Catholic adolescents were more comfortable in their communities during these periods—particularly those with more sectarian experience. Further, applying the same logic as the political tension variable above, the extent to which some Catholic adolescents may have supported the activity of dissident groups would also help to explain these effects.

Limitations of the Study

The findings from this study suggest that systematically coding newspaper articles across a period of time has predictive power for understanding the differences in adolescents’ response to sectarian violence in the community. Overall, these findings support the promise of newspaper coding as a viable approach to assessing the political macrosystem, a level of analysis that has proven elusive in past work. Previous attempts to incorporate this level have relied upon the self-reports of individuals whose ontogenic functioning is being assessed. As previously noted, surveying individuals about political events is not an appropriate substitute for the macrosystem. Newspaper coding allows for a more direct measure of the macro-level. There are, however, some cautions for using this method. The use of untrained coders succeeded in identifying the major societal events taking place during this time period. It is, however, important to pay close attention to the coders who are selected, the ways in which they interpret the constructs of interest (in this case, political tension and ingroup threat), and how these interpretations

may differ from others in the population. This was evident in the current study, as the student-coders' interpretation of which events were "threatening" or "politically tense" may not have always corresponded with the interpretation of adolescents living in the surveyed communities. In addition, relying on individuals to hand-code each newspaper article can be both time-consuming and expensive—especially when developing a data set that spans multiple years. Hopkins and King (2010) recently developed an automated method of content analysis that can be used for classifying documents according to various criteria and estimating the frequency of each category. Automated methods such as this may provide an alternative to hand-coding.

Second, the current study focuses on a time period before social media had become ubiquitous. Today, social media platforms have become the primary means of information gathering for many people. In the age of social media, users can self-select the information they want to be exposed to, thus allowing for a much wider or more narrow exposure to current events as well as more extreme interpretations of those events. Future studies using newspaper coding may need to account for the potential impact of "social media bubbles" and the divergent political climates to which people are exposed. In line with this, the choice of newspapers must be carefully considered across contexts to make sure that the information is truly representative of the political climate. This issue is amplified in societies with strong partisan views or state-controlled media. In the current study, attempts were made to account for this by including both a mainstream newspaper with cross-community readership and a highly circulated Catholic-nationalist newspaper. The inclusion of a Protestant-unionist newspaper (i.e., *The News Letter*), despite its low circulation, may have balanced the distribution of partisan views represented in the data set.

With regard to the survey data, the current study measured adolescents' emotional insecurity using reports from the mothers rather than from the adolescents themselves. This decision was made because adolescent reports of emotional security about the community were not available for all the waves used in this study. This may raise some questions about the accuracy of these reports and the extent to which these adolescents may have appeared more or less insecure than they actually were. Studies have indicated that the mother's depression and anxiety can sometimes influence their reports (Hughes & Gullone, 2010), suggesting the possibility that these mothers projected their own emotional insecurity about the community onto their children. At the same time, research indicates that the discrepancy between mother and child reports is most notable in studies of internalizing behavior (Achenbach, McConaughy, & Howell, 1987; Berg-Nielsen, Vika, & Dahl, 2003). As the Security in the Community Scale (SICS) does include affective and cognitive components (i.e., anxiety about the future, feeling threatened by people from the other community), adolescent reports may have provided a more accurate assessment of these items in particular. The scale also includes behavioral components, however (i.e., staying indoors, problems

sleeping), which would have been easier for the mothers to detect. A combination of both mother and adolescent reports may have provided the clearest picture of adolescents' emotional insecurity about the community. Even so, mother reports have been shown to be a strong predictor of adjustment problems for these adolescents (Cummings et al., 2013b, 2016b). Despite the theoretical uncertainty of relying on mother reports, their psychometric properties are strong.

Future Directions

Overall, the current study contributes both empirically and methodologically to research on political violence, youth development, and conflict transformation in post-accord Belfast. Since Bronfenbrenner's classic conceptualization of Ecological Systems Theory (Bronfenbrenner, 1979), incorporation of the macrosystem has been an important component for the adequate measurement of a child's socio-developmental environment. According to this framework, the macrosystem can influence decisions that lead to social and structural change as well as individuals' interpretation and meaning making surrounding violent experiences. Proper assessment of this level has proven difficult, in part because it requires an engagement with the metrics used in other social sciences, but also because the forces comprising the macrosystem are less tangible than processes emerging from other levels. It has been difficult to assess the macro-level directly without resorting to an aggregation of micro-level survey data. Measurement of the political macrosystem has thus become an important but elusive goal for developmental research on relations between political violence and child adjustment. In this report, we advance and empirically test the use of newspaper coding methods as a promising way forward on this issue.

Building on past research (Cummings et al., 2014, 2017b), the findings from this study reinforce the importance of understanding the specific processes through which violence exposure impacts adolescents. Rather than counting symptoms, it is important to know *who* is most impacted and *when*. In the case of Belfast, the impact of violence exposure varied based on the adolescents' age, ethnicity, and cumulative experience with sectarian violence, as well as the societal levels of intergroup political tension and ingroup threat. During the study period, a *tense* political climate—which appeared to coincide with increased youth participation in antisocial behavior—served as a protective factor for adolescents, regardless of group. Research has already shown that adolescents in this context often mobilize themselves during periods of political tension through recreational rioting (Dwyer et al., 2013; McEvoy-Levy, 2006), though more research may be needed to understand the reasons underlying this behavior and its implications for their development, identity, and overall wellbeing. In addition to this, a *threatening* political climate—which coincided with an

increase in dissident republican activity—served as an added risk factor for Catholic adolescents who had little to no experience with sectarian violence in the community, and a protective factor for Catholic adolescents who had experienced more sectarian violence exposure. This finding raises important questions about ongoing distrust of the police service, civil policing by paramilitaries, and the potentially protective role it plays in these communities.

Despite the contribution of these findings, more information is needed to clarify the pathways through which the political climate affects these adolescents. Are they responding directly to the changing societal discourse surrounding tension or threat (e.g., gathering information through news media or conversations with parents, teachers, and peers) or does the increase in tension and threat coincide with concrete changes to their micro-system (e.g., increased community policing or their own participation in sectarian antisocial behavior)? In other words, what are the proximal processes linking these macro-level forces with individual functioning? In line with this, the quantitative analyses above indicate that there is additional variability in adolescents' emotional insecurity that is not explained by the variables used in this study. Other factors across the social-ecological system may further explain some of this variability, both within- and between-adolescents. One possible avenue for exploration is to assess the political climate along with neighborhood characteristics. This may help to disentangle the effects of macro-level tension and threat from the effects of concrete changes within the neighborhood. The more precision we have in predicting adolescents' emotional insecurity and subsequent potential for developing adjustment problems, the easier it will be to develop effective intervention and prevention programs.

Beyond the context of Northern Ireland, both the findings and the methods from this study can be useful for future research in areas characterized by political unrest. First, it may be necessary to more carefully consider adolescents' motivations for engaging in antisocial behavior and the extent to which these motivations are influenced by the broader political climate. Questions remain as to how and why this behavior may serve as a protective factor. If youth participate in violence and antisocial behavior as a way to regain agency in the midst of political exclusion and economic marginality (Barber, 2009; McEvoy-Levy, 2006; Qouta et al., 2008), then a viable area for future research is to explore how this agency might instead be expressed through civic engagement and other prosocial pursuits. Second, findings suggest that a threatening political climate may serve as an added risk factor for some youth. Future research may want to more closely examine how youths' interpretation of what is happening at the sociopolitical level mediates the relation between a threatening climate and behavioral outcomes. Engaging more deeply with youth during high-threat periods and providing them with spaces to discuss their concerns or mobilize in response may be constructive.

It is additionally worth noting the tendency for researchers to study the social ecology's impact on youth with less attention given to the ways in which youth may contribute to changes in the social ecology. Youth are not simply passive recipients of environmental influence, but they have been shown to play central roles in perpetuating group division, advocating against it, influencing or mobilizing their peers, and fighting for social change. As it relates to the macrosystem in particular, youth have the power to influence the content and direction of group narratives, ideologies, and the shifting of norms. Future research should not only look at the processes through which macro-level factors interrelate with proximal processes to *impact* youth, but it should also consider the agentic roles that youth play in their social environments and their capacity for influencing societal discourse.

The field of developmental psychology has undergone multiple shifts throughout the years that redefined the importance of the context as it relates to psychological development. Even with these shifts and the increase in social-ecological research that followed, too few studies account for the myriad forces existing beyond the individual's immediate environment. More scholars have begun to expand research in this area by using rigorous ethnographic approaches, innovative interviewing techniques, and community-level statistics to convey a deeper understanding of the multilevel influences on individual attitudes, perceptions, and behavior across a period of time (e.g., Barber et al., 2016; Cummings et al., 2013a; McNeely et al., 2018; Wessells et al., 2015). The need for deeper consideration of the macrosystem in particular has recently become urgent as social ecologies across the world face dramatic shifts in response to the global pandemic. Indeed, any socio-political context in the midst of social change, intergroup division, or political unrest has the potential to interrelate with individual development and wellbeing. The current study contributes to this growing body of research by showing that systematic, longitudinal newspaper coding may serve as a viable method for studying such widespread social changes and political divisions. This multilevel combination of measures, especially when used in a mixed methods analysis, can help uncover the processes informing adolescent development and wellbeing.

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References

- A show of strength by dissidents. (2011, January). *Belfast Telegraph*.
- Abdeen, Z., Qasrawi, R., Nabil, S., & Shaheen, M. (2008). Psychological reactions to Israeli occupation: Findings from the national study of school-based screening in Palestine. *International Journal of Behavioral Development*, **32**(4), 290–297. <https://doi.org/10.1177/0165025408092220>
- Aber, J. L., Tubbs, C., Torrente, C., Halpin, P. F., Johnston, B., ..., Wolf, S. (2017). Promoting children's learning and development in conflict-affected countries: Testing change process in the Democratic Republic of the Congo. *Developmental Psychopathology*, **29**, 53–67. <https://doi.org/10.1017/s0954579416001139>
- Achenbach, T. M., McConaughy, S. H., & Howell, C. T. (1987). Child/adolescent behavioral and emotional problems: Implications of cross-informant correlations for situational specificity. *Psychological Bulletin*, **101**, 213–232. <https://doi.org/10.1037/0033-2909.101.2.213>
- Adams, G. (2007, March 26). Gerry Adams's statement in full. *BBC News*. Retrieved from http://news.bbc.co.uk/2/hi/uk_news/northern_ireland/6495827.stm
- Adams, T. M. (2017). *How chronic violence affects human development, social relations, and the practice of citizenship: A systemic framework for action*. Washington, DC: Woodrow Wilson International Center for Scholars.
- Ajdukovic, D., & Biruski, D. C. (2008). Caught between the ethnic sides: Children growing up in a divided post-war community. *International Journal of Behavioral Development*, **32**, 337–347. <https://doi.org/10.1177/0165025408090975>
- Al-Krenawi, A., & Graham, J. R. (2012). The impact of political violence on psychosocial functioning of individuals and families: The case of Palestinian adolescents. *Child and Adolescent Mental Health*, **17**(1), 14–22. <https://doi.org/10.1111/j.1475-3588.2011.00600.x>
- Al-Krenawi, A., Graham, J. R., & Kanat-Maymon, Y. (2009). Analysis of trauma exposure, symptomatology and functioning in Jewish Israeli and Palestinian adolescents. *The British Journal of Psychiatry*, **195**(5), 427–432. <https://doi.org/10.1192/bjp.bp.108.050393>
- Allwood, M. A., Bell-Dolan, D., & Husain, S. A. (2002). Children's trauma and adjustment reactions to violent and nonviolent war experiences. *Journal of the American Academy of Child & Adolescent Psychiatry*, **41**(4), 450–457. <https://doi.org/10.1097/00004583-200204000-00018>
- Another step from darkness into light. (2007, May). *Belfast Telegraph*.
- Archer, B. (2010, June). Man begs sectarian mob to leave him “in peace.” *The Irish News*.
- Baltes, P. B., & Nesselroade, J. R. (Eds.) (1979). *Longitudinal research in the study of behavior and development*. New York: Academic Press.
- Bandura, A., & Walters, R. H. (1963). *Social learning and personality development*. New York: HOLT.
- Bar-Tal, D., & Jacobson, D. (1998). A psychological perspective on security. *Applied Psychology*, **47**(1), 59–71. <https://doi.org/10.1111/j.1464-0597.1998.tb00013.x>
- Bar-Tal, D., Oren, N., & Nets-Zehngut, R. (2014). Socio-psychological analysis of conflict-supporting narratives: A general framework. *Journal of Peace Research*, **51**(5), 662–675. <https://doi.org/10.1177/0022343314533984>
- Barber, B. K. (2001). Political violence, social integration, and youth functioning: Palestinian youth from the Intifada. *Journal of Community Psychology*, **29**(3), 259–280. <https://doi.org/10.1002/jcop.1017>

- Barber, B. K. (2008). Contrasting portraits of war: Youths' varied experiences with political violence in Bosnia and Palestine. *International Journal of Behavioral Development*, **32**, 298–309. <https://doi.org/10.1177/0165025408090972>
- Barber, B. K. (2009). *Adolescents and war: How youth deal with political violence*. New York, NY: Oxford University Press.
- Barber, B. K. (2014). Research on youth and political conflict: Where is the politics? Where are the youth? *Child Development Perspectives*, **8**(3), 125–130. <https://doi.org/10.1111/cdep.12074>
- Barber, B. K., McNeely, C., Olsen, J. A., Belli, R. F., & Doty, S. B. (2016). Long-term exposure to political violence: The particular injury of persistent humiliation. *Social Science & Medicine*, **156**, 154–166. <https://doi.org/10.1016/j.socscimed.2016.03.011>
- Barclay, K., & Liu, J. H. (2003). Who gets voice? (Re)presentation of bicultural relations in New Zealand print media. *New Zealand Journal of Psychology*, **32**(1), 3–12.
- Baron, R. M., & Kenny, D. A. (1986). The moderator-mediator variable distinction in social psychological research: Conceptual, strategic, and statistical considerations. *Journal of Personality and Social Psychology*, **5**(6), 1173–1182. <https://doi.org/10.1037/0022-3514.51.6.1173>
- Barranco, J., & Wisler, D. (1999). Validity and systematicity of newspaper data in event analysis. *European Sociological Review*, **15**(3), 301–322. <https://doi.org/10.1093/oxfordjournals.esr.a018265>
- Batniji, R., Rabaia, Y., Nguyen–Gillham, V., Giacaman, R., Sarraj, E., Punamaki, R. L., ..., Boyce, W. (2009). Health as human security in the occupied Palestinian territory. *The Lancet*, **373**(9669), 1133–1143. [https://doi.org/10.1016/S0140-6736\(09\)60110-0](https://doi.org/10.1016/S0140-6736(09)60110-0)
- BBC. (2011, August 20). *The Omagh-ah by Catherine Brogan* [Video]. YouTube. Retrieved from <https://www.youtube.com/watch?v=yBKrGJ1Pb44>
- Bean, K. (2012). “New dissidents are but old Provisionals writ large?” The dynamics of dissident republicanism in the New Northern Ireland. *The Political quarterly*, **83**(2), 210–218. <https://doi.org/10.1111/j.1467-923X.2012.02300.x>
- Becker, J. (2003). Keeping track of press freedom. *European Journal of Communication*, **18**(1), 107–112.
- Belsky, J. (2008). War, trauma, and children's development: Observations from a modern evolutionary perspective. *International Journal of Behavioral Development*, **32**, 260–271. <https://doi.org/10.1177/0165025408090969>
- Berg-Nielsen, T. S., Vika, A., & Dahl, A. (2003). When adolescents disagree with their mothers: CBCL-YSR discrepancies related to maternal depression and adolescent self-esteem. *Child: Care, Health and Development*, **29**, 207–213. <https://doi.org/10.1046/j.1365-2214.2003.00332.x>
- Betancourt, T. S., Borisova, I. I., Williams, T. P., Brennan, R. T., Whitfield, T. H., de la Soudiere, M., ..., Gilman, S. E. (2010). Sierra Leone's former child soldiers: A follow-up study of psychosocial adjustment and community reintegration. *Child Development*, **81**, 1077–1095. <https://doi.org/10.1111/j.1467-8624.2010.01455.x>
- Betancourt, T. S., & Khan, K. T. (2008). The mental health of children affected by armed conflict: Protective processes and pathways to resilience. *International Review of Psychiatry*, **20**(3), 317–328. <https://doi.org/10.1080/09540260802090363>
- Betancourt, T. S., Newnham, E. A., Layne, C. M., Kim, S., Steinberg, A. M., Ellis, H., & Birman, D. (2012). Trauma history and psychopathology in war-affected refugee children referred for trauma-related mental health services in the United States. *Journal of Traumatic Stress*, **25**(6), 682–690. <https://doi.org/10.1002/jts.21749>
- Biesanz, J. C., Deeb-Sossa, N., Papadakis, A. A., Bollen, K. A., Curran, P. J., & West, S. G. (2004). The role of coding time in estimating and interpreting growth curve models. *Psychological Methods*, **9**(1), 30–52. <https://doi.org/10.1037/1082-989X.9.1.30>
- Bolten, C. E. (2018). Productive work and subjected labor: Children's pursuits and child rights in northern Sierra Leone. *Journal of Human Rights*, **17**(2), 199–214. <https://doi.org/10.1080/14754835.2017.1315296>

- Bonanno, G. A. (2004). Loss, trauma, and human resilience: Have we underestimated the human capacity to thrive after extremely aversive events? *American Psychologist*, **59**(1), 20–28.
- Borooah, V. K., McKee, P. M., Heaton, N., & Collins, G. (1995). Catholic-Protestant income differences in Northern Ireland. *Review of Income and Wealth*, **41**(1), 41–56. <https://doi.org/10.1111/j.1475-4991.1995.tb00092.x>
- Boxer, P., Huesmann, L. R., Dubow, E. F., Landau, S. F., Gvirsman, S. D., Shikaki, K., & Ginges, J. (2013). Exposure to violence across the social ecosystem and the development of aggression: A test of ecological theory in the Israeli-Palestinian conflict. *Child Development*, **84**(1), 163–177. <https://doi.org/10.1111/j.1467-8624.2012.01848.x>
- Brajša-Žganec, A. (2005). The long-term effects of war experiences on children's depression in the Republic of Croatia. *Child Abuse & Neglect*, **29**(1), 31–43. <https://doi.org/10.1016/j.chiabu.2004.07.007>
- “Brandishing a stick”. (2010, July 13). *Belfast Telegraph*.
- Braun, V., & Clarke, V. (2006). Using thematic analysis in psychology. *Qualitative Research in Psychology*, **3**(2), 77–101.
- Bretherton, I., & Munholland, K. A. (2008). Internal working models in attachment relationships: Elaborating a central construct in attachment theory. In J. Cassidy & P. R. Shaver (Eds.), *Handbook of attachment: Theory, research, and clinical applications* (pp. 102–127). New York: Guilford Press.
- Brewer, P., & Venaik, S. (2014). The ecological fallacy in national culture research. *Organization Studies*, **35**(7), 1063–1086. <https://doi.org/10.1177/0170840613517602>
- Bronfenbrenner, U. (1977). Toward an experimental ecology of human development. *American Psychologist*, **32**, 513–531. <https://doi.org/10.1037/0003-066X.32.7.513>
- Bronfenbrenner, U. (1979). *The ecology of human development: Experiments by nature and design*. Cambridge, MA: Harvard University Press.
- Bronfenbrenner, U. (1986). Ecology of the family as a context for human development: Research perspectives. *Developmental Psychology*, **22**(6), 723–742.
- Bronfenbrenner, U. (1993). The ecology of cognitive development: Research models and fugitive findings. In R. H. Wozniak & K. W. Fischer (Eds.), *Development in context: Acting and thinking in specific environments* (pp. 3–44). Hillsdale, NJ: Lawrence Erlbaum Associates, Inc. <https://doi.org/10.1111/1467-9507.00114>
- Bronfenbrenner, U. (1999). Environments in developmental perspective: Theoretical and operational models. In S. L. Friedman & T. D. Wachs (Eds.), *Measuring environment across the lifespan: Emerging methods and concepts* (pp. 3–28). Washington, DC: American Psychological Association Press. <https://doi.org/10.1037/10317-001>
- Bronfenbrenner, U., & Ceci, S. J. (1994). Nature-nurture reconceptualized in developmental perspective: A bioecological model. *Psychological Review*, **101**(4), 568–586. <https://doi.org/10.1037/0033-295X.101.4.568>
- Bronfenbrenner, U., & Evans, G. W. (2000). Developmental science in the 21st century: Emerging questions, theoretical models, research designs and empirical findings. *Social Development*, **9**(1), 115–125. <https://doi.org/10.1111/1467-9507.00114>
- Bronfenbrenner, U., & Morris, P. A. (1998). The ecology of developmental processes. In W. Damon & R. M. Lerner (Eds.), *Handbook of child psychology: Theoretical models of human development* (Vol. 1, 5th ed., pp. 993–1028). New York: John Wiley & Sons, Inc. <https://doi.org/10.1002/9780470147658.chpsy0114>
- Browne, B., & Dwyer, C. (2014). Navigating risk: Understanding the impact of the conflict on children and young people in Northern Ireland. *Studies in Conflict and Terrorism*, **37**(9), 792–805. <https://doi.org/10.1080/1057610X.2014.931213>
- Buckland, P. (1981). “A Protestant Parliament and a Protestant State”: Regional government and religious discrimination in Northern Ireland, 1921–39. In A. C. Duke & C. A. Tamse (Eds.),

- Britain and The Netherlands* (pp. 231–242). Dordrecht: Springer. https://doi.org/10.1007/978-94-009-7695-5_11
- Byrne, J., Conway, M., & Ostermeyer, M. (2005). *Young people's attitudes and experiences of policing, violence and community safety in North Belfast*. Belfast: Institute for Conflict Research. Retrieved from <http://conflictresearch.org.uk/reports/young-people/NIPB-North-Belfast-Youth-Survey.pdf>
- Byrne, J., & Monaghan, L. (2008). *Policing loyalist and republican communities*. Belfast: Institute for Conflict Research.
- Cairns, E. (1987). *Caught in crossfire: Children and the Northern Ireland conflict*. New York: Syracuse University Press.
- Cairns, E. (1996). *Children and political violence*. Cambridge, MA: Blackwell Publishing.
- Cairns, E., & Darby, J. (1998). The conflict in Northern Ireland: Causes, consequences and controls. *American Psychologist*, **53**(7), 754–760. <https://doi.org/10.1037/0003-066X.53.7.754>
- Cairns, E., Kenworthy, J., Campbell, A., & Hewstone, M. (2006). The role of in-group identification, religious group membership and intergroup conflict in moderating in-group and out-group affect. *British Journal of Social Psychology*, **45**, 701–716. <https://doi.org/10.1348/014466605X69850>
- Cairns, E., & Mercer, G. W. (1984). Social identity in Northern Ireland. *Human Relations*, **37**(12), 1095–1102. <https://doi.org/10.1177/001872678403701206>
- Cassidy, J. (1994). Emotion regulation: Influences of attachment relationships. *Monographs of the Society for Research in Child Development*, **59**(2-3), 228–283. <https://doi.org/10.1111/j.1540-5834.1994.tb01287.x>
- Catholic family to quit home following threats. (2008, February). *The Irish News*.
- Causadias, J. M. (2013). A roadmap for the integration of culture into developmental psychopathology. *Development and Psychopathology*, **25**(4pt2), 1375–1398. <https://doi.org/10.1017/S0954579413000679>
- Christ, O., Schmid, K., Lolliot, S., Swart, H., Stolle, D., Tausch, N., ... Hewstone, M. (2014). Contextual effect of positive intergroup contact on outgroup prejudice. *Proceedings of the National Academy of Sciences of the United States of America*, **111**(11), 3996–4000. <https://doi.org/10.1073/pnas.1320901111>
- Cicchetti, D., & Aber, J. L. (1998). Contextualism and developmental psychopathology. *Development and Psychopathology*, **10**(2), 137–141. <https://doi.org/10.1017/S0954579498001540>
- Cicchetti, D., & Valentino, K. (2006). An ecological transactional perspective on child maltreatment: Failure of the average expectable environment and its influence on child development. In D. Cicchetti & D. J. Cohen (Eds.), *Developmental psychopathology* (Vol. **3**, 2nd ed., pp. 129–201). New York, NY: Wiley.
- Cicchetti, D. V. (1994). Guidelines, criteria and rules of thumb for evaluating normed and standardized assessment instruments in psychology. *Psychological Assessment*, **6**(4), 284–290. <https://doi.org/10.1037/1040-3590.6.4.284>
- Cingranelli, D. L., & Richards, D. L. (1999). Respect for human rights after the end of the cold war. *Journal of Peace Research*, **36**(5), 511–534. <https://doi.org/10.1177/0022343399036005002>
- Clarke, S., Sturcke, J., & Percival, J. (2009, March). Timeline: Northern Ireland. *The Guardian*. Retrieved from <https://www.theguardian.com/uk/2009/mar/08/northern-ireland-timeline>
- Cohen, J., Cohen, P., West, S. G., & Aiken, L. S. (2003). *Applied multiple regression/correlation analysis for the behavioral sciences*. Mahwah, NJ: Erlbaum.
- Coleman, P. (2000). Intractable conflict. In M. Deutsch & P. Coleman (Eds.), *Handbook of conflict resolution* (pp. 428–450). San Francisco, CA: Jossey-Bass.
- Coleman, R., & Wasike, B. (2004). Visual elements in public journalism newspapers in an election: A content analysis of the photographs and graphics in campaign 2000. *Journal of Communication*, **54**(3), 456–473. <https://doi.org/10.1111/j.1460-2466.2004.tb02639.x>
- Connolly, M. (2009, March). Peace shattered—Real IRA shootings captured on CCTV. *The Irish News*.

- Costigliola, F. (2004). Reading for meaning: Theory, language, and metaphor. In M. J. Hogan & T. G. Patterson (Eds.), *Explaining the history of American foreign relations* (pp. 279–302). Cambridge: Cambridge University Press.
- Cummings, E. M., & Davies, P. T. (1996). Emotional security as a regulatory process in normal development and the development of psychopathology. *Development and Psychopathology*, **8**, 123–139. <https://doi.org/10.1017/S0954579400007008>
- Cummings, E. M., & Davies, P. T. (2011). *Marital conflict and children: An emotional security perspective*. New York: The Guilford Press.
- Cummings, E. M., Goeke-Morey, M., Merrilees, C. E., Taylor, L. K., & Shirlow, P. A. (2014). A social-ecological, process-oriented perspective on political violence and child development. *Child Development Perspectives*, **12**(1), 16–38. <https://doi.org/10.1111/cdep.12067>
- Cummings, E. M., Goeke-Morey, M. C., Schermerhorn, A. C., Merrilees, C. E., & Cairns, E. (2009). Children and political violence from a social ecological perspective: Implications from research on children and families in Northern Ireland. *Clinical Child and Family Psychology Review*, **12**, 16–38. <https://doi.org/10.1007/s10567-009-0041-8>
- Cummings, E. M., Merrilees, C. E., Schermerhorn, A. C., Goeke-Morey, M., Shirlow, P., & Cairns, E. (2010a). Testing a social ecological model for relations between political violence and child adjustment in Northern Ireland. *Development and Psychopathology*, **22**(2), 405–418. <https://doi.org/10.1017/S0954579410000143>
- Cummings, E. M., Merrilees, C. E., Schermerhorn, A. C., Goeke-Morey, M., Shirlow, P., & Cairns, E. (2011). Longitudinal pathways between political violence and child adjustment: The role of emotional security about the community in Northern Ireland. *Journal of Abnormal Child Psychology*, **39**(2), 213–224. <https://doi.org/10.1007/s10802-010-9457-3>
- Cummings, E. M., Merrilees, C., Taylor, L. K., Goeke-Morey, M., & Shirlow, P. (2017a). Emotional insecurity about the community: A dynamic, within-person mediator of child adjustment in contexts of political violence. *Development and Psychopathology*, **29**, 27–36. <https://doi.org/10.1017/S0954579416001097>
- Cummings, E. M., Merrilees, C. E., Schermerhorn, A. C., Goeke-Morey, M. C., Shirlow, P., & Cairns, E. (2012). Political violence and child adjustment: Longitudinal tests of sectarian violence, family conflict and insecurity as explanatory pathways. *Child Development*, **83**, 461–468. <https://doi.org/10.1111/j.1467-8624.2011.01720.x>
- Cummings, E. M., Merrilees, C. E., Taylor, L. K., & Mondì, C. F. (2017b). *Political violence, armed conflict, and youth adjustment: A developmental psychopathology perspective on research and intervention*. Cham: Springer.
- Cummings, E. M., Merrilees, C. E., Taylor, L. K., Shirlow, P., Goeke-Morey, M. C., & Cairns, E. (2013a). Longitudinal relations between sectarian and nonsectarian community violence and child adjustment in Northern Ireland. *Development and Psychopathology*, **25**(3), 615–627. <https://doi.org/10.1017/S0954579413000059>
- Cummings, E. M., & Miller-Graff, L. E. (2015). Emotional security theory: An emerging theoretical model for youths' psychological and physiological responses across multiple developmental contexts. *Current Directions in Psychological Science*, **24**(3), 208–213. <https://doi.org/10.1177/0963721414561510>
- Cummings, E. M., Schermerhorn, A., Merrilees, C., Goeke-Morey, M., Shirlow, P., & Cairns, E. (2010b). Political violence and child adjustment in Northern Ireland: Testing pathways in a social-ecological model including single- and two-parent families. *Developmental Psychology*, **46**, 827–841. <https://doi.org/10.1037/a0019668>
- Cummings, E. M., Shirlow, P., Browne, B., Dwyer, C., Merrilees, C. E., & Taylor, L. K. (2016a). *Growing up on an interface: Findings and implications for the social needs, mental health and lifetime opportunities of Belfast youth*. Retrieved from <https://www.ofmdfmi.gov.uk/publications/growing-interface-findings-and-implications-social-needs-mental-health-and-lifetime>

- Cummings, E. M., Taylor, L. K., Du, H., Merrilees, C. E., Goeke-Morey, M. C., & Shirlow, P. (2019). Examining bidirectional pathways between exposure to political violence and adolescent adjustment in Northern Ireland. *Journal of Clinical Child and Adolescent Psychology*, **48**(2), 296–305. <https://doi.org/10.1080/15374416.2016.1266646>
- Cummings, E. M., Taylor, L. K., Merrilees, C. E., Goeke-Morey, M., Shirlow, P., & Cairns, E. (2013b). Relations between political violence and child adjustment: A four-wave test of the role of emotional insecurity about community. *Developmental Psychology*, **49**(12), 2212–2224. <https://doi.org/10.1037/a0032309>
- Cummings, E. M., Taylor, L. K., Merrilees, C. E., Goeke-Morey, M. C., & Shirlow, P. (2016b). Emotional insecurity in the family and community and youth delinquency in Northern Ireland: A person-oriented analysis across five waves. *Journal of Child Psychology and Psychiatry*, **57**(1), 47–54. <https://doi.org/10.1111/jcpp.12427>
- Curran, E. (2009, March). We can't allow peace to slip from our grasp. *Belfast Telegraph*.
- Curran, P. J., & Bauer, D. J. (2011). The disaggregation of within-person and between-person effects in longitudinal models of change. *Annual Review of Psychology*, **62**, 583–619. <https://doi.org/10.1146/annurev.psych.093008.100356>
- Darby, J. (1983). *Northern Ireland: The background to the conflict*. Belfast and New York: Syracuse University Press.
- Darling, N. (2007). Ecological Systems Theory: The person in the center of the circles. *Research in human development*, **4**(3–4), 203–217. <https://doi.org/10.1080/15427600701663023>
- Dawes, A., & Cairns, E. (1998). The Machel Study: Dilemmas of cultural sensitivity and universal rights of children. *Peace and Conflict: Journal of Peace Psychology*, **4**(4), 335–348. https://doi.org/10.1207/s15327949pac0404_3
- Deal is sealed. (2010, February). *Belfast Telegraph*.
- Derry has been a focal point of dissident activity. (2011, January). *Belfast Telegraph*.
- Devolution restored—Politicians reassemble and play to the gallery. (2007, May). *The Irish News*.
- Did UVF leaders sanction the killing of Bobby Moffett? (2010, June). *Belfast Telegraph*.
- Dinnen, C. (2011, April 3). Omagh bomb: Republicans are “seething with anger.” *Channel 4*. Retrieved from <https://www.channel4.com/news/omagh-bomb-aimed-to-destablise-n-ireland>
- Dissident republican paramilitaries at their highest since Omagh. (2010, April). *The Irish News*.
- Dissident threat—Real IRA shot my son says mum. (2011, January). *The Irish News*.
- Dubow, E. F., Boxer, P., Husemann, L. R., Shikaki, K., Landau, S., Gvirsman, S. D., & Ginges, J. (2010). Exposure to conflict and violence across contexts: Relations to adjustment among Palestinian children. *Journal of Clinical Child and Adolescent Psychology*, **39**(1), 103–116. <https://doi.org/10.1080/15374410903401153>
- Duraković-Belko, E., Kulenović, A., & Dapić, R. (2003). Determinants of posttraumatic adjustment in adolescents from Sarajevo who experienced war. *Journal of Clinical Psychology*, **59**(1), 27–40. <https://doi.org/10.1002/jclp.10115>
- Dwyer, C., Browne, B., Shirlow, P., Cummings, E. M., Merrilees, C. E., & Taylor, L. K. (2013). Growing up on an interface: Findings and implications for the social needs, mental health and lifetime opportunities for Belfast youth (Qualitative report). Unpublished report.
- Dyregrov, A., Gupta, L., Gjestead, R., & Mukanoheli, E. (2000). Trauma exposure and psychological reactions to genocide among Rwandan children. *Journal of Traumatic Stress*, **13**(1), 3–21. <https://doi.org/10.1023/A:1007759112499>
- Eide, P., & Allen, C. B. (2005). Recruiting transcultural qualitative research participants: A conceptual model. *International Journal of Qualitative Methods*, **4**(2), 44–56. <https://doi.org/10.1177/160940690500400204>
- Eisenberg, N., Spinrad, T. L., & Eggum, N. D. (2010). Emotion-related self-regulation and its relation to children's maladjustment. *Annual Review of Clinical Psychology*, **6**, 495–525. <https://www.annualreviews.org/doi/10.1146/annurev.clinpsy.121208.131208>

- Elder, G. H., & Rockwell, R. C. (1979). The life-course and human development: An ecological perspective. *International Journal of Behavioural Development*, **2**, 1–21. <https://doi.org/10.1177/016502547900200101>
- Ellison, G., & Mulcahy, A. (2001). Policing and social conflict in Northern Ireland. *Policing and Society*, **11**, 243–258. <https://doi.org/10.1080/10439463.2001.9964865>
- Extra police drafted in after attacks. (2010, January). *Belfast Telegraph*.
- Fatogun, B. (2006, April). “Sustained missile attacks” at peace line. *The Irish News*.
- Feldman, R., Vengrover, A., Eidelman-Rothman, M., & Zagoory-Sharon, O. (2013). Stress reactivity in war-exposed young children with and without posttraumatic stress disorder: Relations to maternal stress hormones, parenting, and child emotionality and regulation. *Development and Psychopathology*, **25**(4), 943–955. <https://doi.org/10.1017/S0954579413000291>
- Ferman, D. (2013). A parade or a riot: A discourse analysis of two ethnic newspapers on the 2011 marching season in Northern Ireland. *Journal of Media and Religion*, **12**(2), 55–70. <https://doi.org/10.1080/15348423.2013.811367>
- Ford, J. D., & Delker, B. C. (2018). Polyvictimization in childhood and its adverse impacts across the lifespan: Introduction to the special issue. *Journal of Trauma & Dissociation*, **19**(3), 275–288. <https://doi.org/10.1080/15299732.2018.1440479>
- France24. (2010, June). *Timeline of the Northern Ireland conflict*. France24.com. Retrieved from <https://www.france24.com/en/20100615-timeline-uk-northern-ireland-conflict-bloody-sunday>
- Furr, J. M., Comer, J. S., Edmunds, J. M., & Kendall, P. C. (2010). Disasters and youth: A meta-analytic examination of posttraumatic stress. *Journal of Consulting and Clinical Psychology*, **78**(6), 765–780. <https://doi.org/10.1037/a0021482>
- Fury as Real IRA van bomb alerts hit city. (2010, March). *Belfast Telegraph*.
- Galtung, J. (1969). Violence, peace and peace research. *Journal of Peace Research*, **6**(3), 167–191. <https://doi.org/10.1177/002234336900600301>
- Galtung, J. (1990). Cultural violence. *Journal of Peace Research*, **27**(3), 291–305.
- Giacaman, R., Shannon, H. S., Saab, H., Arya, N., & Boyce, W. (2007). Individual and collective exposure to political violence: Palestinian adolescents coping with conflict. *The European Journal of Public Health*, **17**(4), 361–368. <https://doi.org/10.1093/eurpub/ckl260>
- Gitlin, T. (1979). Prime time ideology: The hegemonic process in television entertainment. *Social Problems*, **26**(3), 251–266. <https://doi.org/10.2307/800451>
- Goeke-Morey, M. C., Cairns, E., Merrilees, C. E., Schermerhorn, A. C., Shirlow, P., & Cummings, E. M. (2013). Maternal religiosity, family stressors and resources, and children’s attachment security in Northern Ireland. *Social Development*, **22**, 19–37. <https://doi.org/10.1111/j.1467-9507.2012.00659.x>
- Goeke-Morey, M. C., Cairns, E., Taylor, L. K., Merrilees, C. E., Shirlow, P., & Cummings, E. M. (2014). Predictors of in-group identity in Northern Ireland: Impact of past sectarian conflict, relative deprivation and church attendance. *Journal of Community and Applied Social Psychology*, **25**(4), 283–295. <https://doi.org/10.1002/2Fcasp.2211>
- Goeke-Morey, M. C., & Cummings, E. M. (2017). Religiosity and parenting: Recent directions in process-oriented research. *Current Opinion in Psychology*, **15**, 7–12. <https://doi.org/10.1016/j.copsyc.2017.02.006>
- Goeke-Morey, M. C., Cummings, E. M., Ellis, K., Merrilees, C. E., Schermerhorn, A. C., Shirlow, P., & Cairns, E. (2009). The differential impact on children of inter- and intra-community violence in Northern Ireland. *Peace and Conflict: Journal of Peace Psychology*, **15**(4), 367–383. <https://doi.org/10.1080/10781910903088932>
- Goldstein, R. D., Wampler, N. S., & Wise, P. H. (1997). War experiences and distress symptoms of Bosnian children. *Pediatrics*, **100**(5), 873–878. <https://doi.org/10.1542/peds.100.5.873>
- Graham, J. W. (2009). Missing data analysis: Making it work in the real world. *Annual Review of Psychology*, **60**, 549–576.

- Graham, W. (2007, March). The final step. *Irish News*.
- Greenaway, K. H., & Cruwys, T. (2018). The source model of group threat: Responding to internal and external threats. *American Psychologist*, **74**, 218–231. <https://doi.org/10.1037/amp0000321>
- Gurr, T. R. (1970). *Why men rebel*. Princeton, NJ: Princeton University Press.
- Hadi, F. A., & Llabre, M. M. (1998). The Gulf Crisis experience of Kuwaiti children: Psychological and cognitive factors. *Journal of Traumatic Stress*, **11**(1), 45–56. <https://doi.org/10.1023/A:1024453015176>
- Hair, J. F., Black, W. C., Babin, B. J., & Anderson, R. E. (2010). *Multivariate data analysis* (7th ed.). Upper Saddle River, NJ: Prentice Hall.
- Hall, B. J., Tol, W. A., Jordans, M. J., Bass, J., & de Jong, J. T. (2014). Understanding resilience in armed conflict: Social resources and mental health of children in Burundi. *Social Science & Medicine*, **114**, 121–128. <https://doi.org/10.1016/j.socscimed.2014.05.042>
- Hallgren, K. A. (2012). Computing inter-rater reliability for observational data: An overview and tutorial. *Tutorials in Quantitative Methods for Psychology*, **8**(1), 23–34. <https://doi.org/10.20982/tqmp.08.1.p023>
- Hammack, P. L. (2011). *Narrative and the politics of identity: The cultural psychology of Israeli and Palestinian youth* (pp. 15–50). New York: Oxford University Press.
- Hancock, L. E. (2008). The Northern Irish Peace Process: From top to bottom. *International Studies Review*, **10**(2), 203–238. <https://doi.org/10.1111/j.1468-2486.2008.00771.x>
- Haydon, D., & Scraton, P. (2008). Conflict, regulation and marginalization in the North of Ireland: The experiences of children and young people. *Current Issues in Criminal Justice*, **20**, 59–78. <https://doi.org/10.1080/10345329.2008.12056187>
- Heber, A. (2011). Fear of crime in the Swedish daily press—Descriptions of an increasingly unsafe society. *Journal of Scandinavian Studies in Criminology & Crime Prevention*, **12**, 63–79. <https://doi.org/10.1080/14043858.2011.561623>
- Hehman, E., Graber, E. C., Hoffman, L. H., & Gaertner, S. L. (2012). Warmth and competence: A content analysis of photographs depicting American presidents. *Psychology of Popular Media Culture*, **1**(1), 46–52.
- Henderson, D. (2010, April). Dissident risk at its highest since Omagh. *The Irish News*.
- Hirsch, M. (2008). The generation of postmemory. *Poetics Today*, **29**(1), 103–128. <https://doi.org/10.1215/03335372-2007-019>
- Höglund, K., & Zartman, I. W. (2006). Violence by the state: Official spoilers and their allies. In J. Darby (Ed.), *Violence and reconstruction* (pp. 121–142). Notre Dame, IN: University of Notre Dame Press.
- Hopkins, D. J., & King, G. (2010). A method of automated nonparametric content analysis for social science. *American Journal of Political Science*, **54**(1), 229–247. <https://doi.org/10.1111/j.1540-5907.2009.00428.x>
- Horgan, J., & Morrison, J. (2011). Here to stay? The rising threat of violent dissident republicanism in Northern Ireland. *Terrorism and Political Violence*, **23**, 642–669. <https://doi.org/10.1080/09546553.2011.594924>
- Huesmann, L. R., Dubow, E. F., Boxer, P., Landau, S. F., Gvirsman, S. D., & Shikaki, K. (2017). Children's exposure to violent political conflict stimulates aggression at peers by increasing emotional distress, aggressive script rehearsal, and normative beliefs favoring aggression. *Development and Psychopathology*, **29**(1), 39–50. <https://doi.org/10.1017/S0954579416001115>
- Hughes, E. K., & Gullone, E. (2010). Discrepancies between adolescent, mother, and father reports of adolescent internalizing symptom levels and their association with parent symptoms. *Journal of Clinical Psychology*, **66**(9), 978–995. <https://doi.org/10.1002/jclp.20695>
- Hughes, J., Campbell, A., Hewstone, M., & Cairns, E. (2007). Segregation in Northern Ireland—Implications for community relations policy. *Policy Studies*, **28**, 35–53. <https://doi.org/10.1080/01442870601121429>

- I fear for the life of my son, 4, after death threat from loyalists. (2007, December). *Belfast Telegraph*.
- It's the lost generation: Rioters as young as ten. (2010, July). *Belfast Telegraph*.
- Jarman, N. (2005). *No longer a problem? Sectarian violence in Northern Ireland*. Belfast: Institute for Conflict Research. Retrieved from <http://conflictresearch.org.uk/reports/hatecrime/No-Longer-a-Problem-Sectarian-Violence-in-Northern-Ireland.pdf>
- Jim Allister says NI universities must address Protestant imbalance. (2011, October 18). *BBC News*. Retrieved from <https://www.bbc.com/news/uk-northern-ireland-15347857>
- Jones, L., & Kafetsios, K. (2005). Exposure to political violence and psychological well-being in Bosnian adolescents: A mixed method approach. *Clinical Child Psychology and Psychiatry*, **10**(2), 157–176. <https://doi.org/10.1177/1359104505051209>
- Keresteš, G. (2006). Children's aggressive and prosocial behavior in relation to war exposure: Testing the role of perceived parenting and child's gender. *International Journal of Behavioral Development*, **30**(3), 227–239. <https://doi.org/10.1177/0165025406066756>
- Khalaf, R. S. (2014). Lebanese youth narratives: A bleak post-war landscape. *Compare*, **44**(1), 97–116. <https://doi.org/10.1080/03057925.2013.859899>
- Khamis, V. (2012). Impact of war, religiosity and ideology on PTSD and psychiatric disorders in adolescents from Gaza Strip and South Lebanon. *Social Science & Medicine*, **74**(12), 2005–2011. <https://doi.org/10.1016/j.socscimed.2012.02.025>
- Kim, A. E., Kumanyika, S., Shive, D., Igweatu, U., & Kim, S. (2010). Coverage and framing of racial and ethnic health disparities in U.S. newspapers, 1996–2005. *American Journal of Public Health*, **100**(1), 224–231.
- Klandermans, P. G. (2013). Identity politics and politicized identities: Identity processes and the dynamics of protest. *Political Psychology*, **35**, 1–22. <https://doi.org/10.1111/pops.12167>
- Klasen, F., Oettingen, G., Daniels, J., Post, M., Hoyer, C., & Adam, H. (2010). Posttraumatic resilience in former Ugandan child soldiers. *Child Development*, **81**(4), 1096–1113. <https://doi.org/10.1111/j.1467-8624.2010.01456.x>
- Knafo, A., & Jaffee, S. (2013). Gene–environment correlation in developmental psychopathology. *Development and Psychopathology*, **25**(1), 1–6. <https://doi.org/10.1017/S0954579412000855>
- Kohrt, B. A., Jordans, M. J., Tol, W. A., Perera, E., Karki, R., Koirala, S., & Upadhaya, N. (2010). Social ecology of child soldiers: Child, family, and community determinants of mental health, psychosocial well-being, and reintegration in Nepal. *Transcultural Psychiatry*, **47**(5), 727–753. <https://doi.org/10.1177/1363461510381290>
- Kohrt, B. A., Jordans, M. J., Tol, W. A., Speckman, R. A., Maharjan, S. M., Worthman, C. M., & Komproe, I. H. (2008). Comparison of mental health between former child soldiers and children never conscripted by armed groups in Nepal. *Journal of the American Medical Association*, **300**(6), 691–702. <https://doi.org/10.1001/jama.300.6.691>
- Ladd, G. W., & Cairns, E. (1996). Children: Ethnic and political violence. *Child Development*, **67**(1), 14–18. <https://doi.org/10.1111/j.1467-8624.1996.tb01715.x>
- Laor, N., Wolmer, L., & Cohen, D. J. (2001). Mothers' functioning and children's symptoms 5 years after a SCUD missile attack. *American Journal of Psychiatry*, **158**(7), 1020–1026.
- Larkin, C. (2010). Beyond the war? The Lebanese postmemory experience. *International Journal of Middle East Studies*, **42**, 615–635. <https://doi.org/10.1176/appi.ajp.158.7.1020>
- Latchem-Hastings, J. (2019). Gatekeepers in ethnography. In P. Atkinson, S. Delamont, A. Cernat, J. W. Sakshaug, & R. A. Williams (Eds.), *SAGE Research Methods Foundations*. Sage. <https://doi.org/10.4135/9781526421036835217>
- Laufer, A., & Solomon, Z. (2011). The role of religious orientations in youth's posttraumatic symptoms after exposure to terror. *Journal of Religion and Health*, **50**(3), 687–699. <https://doi.org/10.1007/s10943-009-9270-x>

- Lavi, I., & Slone, M. (2011). Resilience and political violence: A cross-cultural study of moderating effects among Jewish-and Arab-Israeli youth. *Youth & Society*, **43**(3), 845–872. <https://doi.org/10.1177/0044118X09353437>
- Lavi, T., & Solomon, Z. (2005). Palestinian youth of the Intifada: PTSD and future orientation. *Journal of the American Academy of Child & Adolescent Psychiatry*, **44**(11), 1176–1183. <https://doi.org/10.1097/01.chi.0000177325.47629.4c>
- Lederach, J. P. (1997). *Building peace: Sustainable reconciliation in divided societies*. Washington, DC: United States Institute for Peace Press.
- Lee, B. X. (2015). Causes and cures II: The biology of violence. *Aggression and Violent Behavior*, **25**, 204–209. <https://doi.org/10.1016/j.avb.2015.10.002>
- Lehrner, A., & Yehuda, R. (2018). Trauma across generations and paths to adaptation and resilience. *Psychological Trauma: Theory, Research, Practice, and Policy*, **10**(1), 22–29. <https://doi.org/10.1037/tra0000302>
- Lerner, R. M., & Castellino, D. R. (2002). Contemporary developmental theory and adolescence: Developmental systems and applied developmental science. *Journal of Adolescent Health*, **31**, 122–135. [https://doi.org/10.1016/s1054-139x\(02\)00495-0](https://doi.org/10.1016/s1054-139x(02)00495-0)
- Lerner, R. M., Dowling, E., & Chaudhuri, J. (2008). Methods of contextual assessment and assessing contextual methods: A developmental systems perspective. In D. M. Teti (Ed.), *Handbook of research methods in developmental science* (pp. 183–209). Cambridge, MA: Blackwell Publishing Ltd.
- Lerner, R. M., & Kauffman, M. B. (1985). The concept of development in contextualism. *Developmental Review*, **5**, 309–333. <https://doi.org/10.1037/tra0000302>
- Little, R. J., & Rubin, D. B. (2014). *Statistical analysis with missing data* (2nd ed.). Hoboken, NJ: John Wiley & Sons.
- Llabre, M. M., & Hadi, F. (1997). Social support and psychological distress in Kuwaiti boys and girls exposed to the Gulf crisis. *Journal of Clinical Child Psychology*, **26**(3), 247–255. https://doi.org/10.1207/s15374424jccp2603_3
- Llabre, M. M., & Hadi, F. (2009). War-related exposure and psychological distress as predictors of health and sleep: A longitudinal study of Kuwaiti children. *Psychosomatic Medicine*, **71**(7), 776–783. <https://doi.org/10.1080/17467586.2011.635674>
- Lovell, E. L., & Cummings, E. M. (2001). *Conflict, conflict resolution, and the children of Northern Ireland: Towards understanding the impact on children and families* (Joan B. Kroc Institute Occasional Paper Series, 21). Notre Dame, IN: Kroc Institute for International Peace Studies, University of Notre Dame.
- Luningham, J. M., Merrilees, C. E., Taylor, L. K., Goeke-Morey, M., Shirlow, P., Wentz, B., & Cummings, E. M. (2020). Relations among father's presence, family conflict, and adolescent adjustment in Northern Ireland. *Child Development*. <https://doi.org/10.1111/cdev.13446>
- Lynch, M., & Cicchetti, D. (1998). An ecological-transactional analysis of children and contexts: The longitudinal interplay among child maltreatment, community violence, and children's symptomatology. *Development and Psychopathology*, **10**, 235–257. <https://doi.org/10.1017/S095457949800159X>
- Mac Ginty, R. (2006). Post-accord crime. In J. Darby (Ed.), *Violence and reconstruction* (pp. 101–119). Notre Dame, IN: University of Notre Dame Press.
- Mac Ginty, R., & du Toit, P. (2007). A disparity of esteem: Relative group status in Northern Ireland after the Belfast Agreement. *Political Psychology*, **28**(1), 13–31. <https://doi.org/10.1111/j.1467-9221.2007.00549.x>
- Mac Ginty, R., Muldoon, O. T., & Ferguson, N. (2007). No war, no peace: Northern Ireland after the agreement. *Political Psychology*, **28**(1), 1–11. <https://doi.org/10.1111/j.1467-9221.2007.00548.x>
- Macksoud, M. S. (1992). Assessing war trauma in children: A case study of Lebanese children. *Journal of Refugee Studies*, **5**, 1–15. <https://doi.org/10.1093/jrs/5.1.1>

- Masten, A. S., & Narayan, A. J. (2012). Child development in the context of disaster, war, and terrorism: Pathways of risk and resilience. *Annual Review of Psychology*, **63**, 227–257.
- McAdams, D. (2001). The psychology of life stories. *Review of General Psychology*, **5**(2), 100–122. <https://doi.org/10.1037/1089-2680.5.2.100>
- McAleese, D. (2007, June). Man convicted of brutal attack. *Belfast Telegraph*.
- McAleese, D. (2011, May). Officers tackle almost 100 bombing incidents. *Belfast Telegraph*.
- McAlister, M. (2001). *Epic Encounters: Culture, Media, and U.S. Interests in the Middle East, 1945–2000*. Berkeley, CA: University of California Press.
- McAloney, K., McCrystal, P., Percy, A., & McCartan, C. (2009). Damaged youth: Prevalence of community violence exposure and implications for adolescent well-being in post-conflict Northern Ireland. *Journal of Community Psychology*, **37**(5), 635–648. <https://doi.org/10.1002/jcop.20322>
- McCaffrey, B. (2007a, September). City unsafe for Catholics priest warns. *The Irish News*.
- McCaffrey, B. (2007b, November). Victim says UDA's words are no comfort—it must disarm. *The Irish News*.
- McCaffrey, B. (2007c, June). Massacre families say police have treated them like mugs. *The Irish News*.
- McCaffrey, B. (2010a, February 4). Dissident attacks—Families still out of their homes after bomb attack on PSNI base. *The Irish News*.
- McCaffrey, B. (2010b, July). Rioters attack female driver as dissident shoots police officers. *The Irish News*.
- McCambridge, J. (2007, November). Statement “meaningless”, says murdered postman’s mum. *Belfast Telegraph*.
- McCambridge, J., & Lister, S. (2010, January). Pressure grows on parties to reach agreement on policing. *Belfast Telegraph*.
- McCartney, C. (1999). Introduction. In C. McCartney (Ed.), *Striking a balance: The Northern Ireland Peace Process. Accord: An International Review of Peace Initiatives* (Vol. 8, pp. 10–18). London, UK: Conciliation Resources.
- McCombs, M. E., & Shaw, D. L. (1972). The agenda-setting function of mass media. *The Public Opinion Quarterly*, **36**(2), 176–187. <https://doi.org/10.1086/267990>
- McCorry, M. L. (2010, March). Attacks in North—Police called on to respond better to petrol-bomb mob. *The Irish News*.
- McCorry, M. L. (2011, February). Youths “threatened”. *The Irish News*.
- McEvoy, K., & Shirlow, P. (2009). Re-imagining DDR ex-combatants, leadership and moral agency in conflict transformation. *Theoretical Criminology*, **13**(1), 31–59. <https://doi.org/10.1177/1362480608100172>
- McEvoy-Levy, S. (2006). *Troublemakers or Peacemakers? Youth and post-accord peacebuilding*. Notre Dame, IN: University of Notre Dame Press.
- McGraw, K. O., & Wong, S. P. (1996). Forming inferences about some intraclass correlation coefficients. *Psychological Methods*, **1**(1), 30–46. <https://doi.org/10.1037/1082-989X.1.1.30>
- McGrellis, S. (2005). *Pushing the boundaries in Northern Ireland: Young people, violence and sectarianism*. London: Families and Social Capital ESRC Research Group. Retrieved from <http://www1.lsbu.ac.uk/ahs/downloads/families/familieswp8.pdf>
- McKittrick, D., & McVea, D. (2002). *Making sense of the Troubles: The story of the conflict in Northern Ireland*. London: New Amsterdam Books.
- McNeely, C. A., Barber, B. K., Giacaman, R. F., Belli, R. F., & Daher, M. (2018). Long-term health consequences of movement restrictions for Palestinians, 1987–2011. *American Journal of Public Health*, **108**(1), 77–78.

- McWilliams, M., & Fearon, K. (1999). Problems of implementation. In C. McCartney (Ed.), *Striking a balance: The Northern Ireland Peace Process. Accord: An International Review of Peace Initiatives* (Vol. 8, pp. 60–67). London, UK: Conciliation Resources.
- Merrilees, C. E., Cairns, E., Taylor, L. K., Goeke-Morey, M. C., Shirlow, P., & Cummings, E. M. (2013). Social identity and youth aggressive and delinquent behaviors in a context of political violence. *Political Psychology*, **34**(5), 695–711. <https://doi.org/10.1111/pops.12030>
- Merrilees, C. E., Taylor, L. K., Baird, R., Goeke-Morey, M. C., Shirlow, P., & Cummings, E. M. (2018). Neighborhood effects of intergroup contact on change in youth intergroup bias. *Journal of Youth and Adolescence*, **47**(1), 77–87. <https://doi.org/10.1007/s10964-017-0684-6>
- Merrilees, C. E., Taylor, L. K., Goeke-Morey, M. C., Shirlow, P., & Cummings, E. M. (2014). Youth in contexts of political violence: A developmental approach to the study of youth identity and emotional security in their communities. *Peace and Conflict: Journal of Peace Psychology*, **20**(1), 26–38. <https://doi.org/10.1037/a0035581>
- Merrilees, C. E., Taylor, L. K., Goeke-Morey, M. C., Shirlow, P., Cummings, E. M., & Cairns, E. (2013). The protective role of group identity: Sectarian antisocial behavior and adolescent emotion problems. *Child Development*, **85**(1), 412–420. <https://doi.org/10.1111/cdev.12125>
- Miller, M. K., Peake, J. S., & Boulton, B. A. (2010). Testing the Saturday Night Live hypothesis: Fairness and bias in newspaper coverage of Hillary Clinton's presidential campaign. *Politics & Gender*, **6**, 169–198. <https://doi.org/10.1017/S1743923X10000036>
- Mistry, J., & Dutta, R. (2015). Human development and culture: Conceptual and methodological issues. In W. F. Overton & P. C. Molenaar (Eds.), *Handbook of child psychology and developmental science: Theory and method* (Vol. 1, 7th ed., pp. 369–406). Hoboken, NJ: Wiley.
- Moffitt, T. E. (2013). Childhood exposure to violence and lifelong health: Clinical intervention science and stress-biology research join forces. *Development and Psychopathology*, **25**, 1619–1634. <https://doi.org/10.1017/S0954579413000801>
- Möller, F. (2011). News reports versus written narratives. In K. Höglund & M. Öberg (Eds.), *Understanding peace research: Methods and challenges* (pp. 74–88). New York: Routledge.
- More steps still to take on road to peace. (2010, January). *Belfast Telegraph*.
- Morrison, A. (2010, July). Six officers hurt as rival gangs clash at interface. *The Irish News*.
- Moulton, E. (2008, August). Gunmen back on streets. *Belfast Telegraph*.
- Muldoon, O. (2013). Understanding the impact of political violence in childhood: A theoretical review using a social identity approach. *Clinical Psychology Review*, **33**(8), 929–939. <https://doi.org/10.1016/j.cpr.2013.07.004>
- Muldoon, O. T., McLaughlin, K., Rougier, N., & Trew, K. (2008). Adolescents' explanations for paramilitary involvement. *Journal of Peace Research*, **45**(5), 681–695. <https://doi.org/10.1177/0022343308094330>
- Muldoon, O. T., & Trew, K. (2000). Children's experiences and adjustment to conflict-related events in Northern Ireland. *Peace Psychology: Journal of Peace and Conflict*, **6**(2), 157–176. https://doi.org/10.1207/S15327949PAC0602_4
- Muldoon, O. T., Trew, K., Todd, J., Rougier, N., & McLaughlin, K. (2007). Religious and national identity after the Belfast Good Friday Agreement. *Political Psychology*, **28**(1), 89–103. <https://doi.org/10.1111/j.1467-9221.2007.00553.x>
- Mullan, K. (2007, April). Child's brush with death in bomb bid; Ex-DPP member tells of grand-daughter's close call. *Belfast Telegraph*.
- Murders. (2009, July). Murders almost wrecked gun move. *Belfast Telegraph*.
- Murphy, E. C. (2012). Problematizing Arab youth: Generational narratives of systemic failure. *Mediterranean Politics*, **17**(1), 5–22. <https://doi.org/10.1080/13629395.2012.655043>
- Myers, D. J., & Caniglia, B. S. (2004). All the rioting that's fit to print: Selection effects in national newspaper coverage of civil disorders, 1968–1969. *American Sociological Review*, **69**(4), 519–543. <https://doi.org/10.1177/000312240406900403>

- Nicholson, J. S., Deboeck, P. R., & Howard, W. (2017). Attrition in developmental psychology: Review of modern missing data reporting and practices. *International Journal of Behavioral Development*, **41**(1), 143–153. <https://doi.org/10.1177/0165025415618275>
- Northern Ireland Office. (April 10, 1998). *The Belfast Agreement: An Agreement Reached at the Multi-Party Talks on Northern Ireland*. Belfast: HMSO. Retrieved from <https://www.gov.uk/government/publications/the-belfast-agreement>
- Northern Ireland Statistics and Research Agency. (2017). *Statistics: Crime and justice; Crimes (excluding fraud) recorded with a sectarian hate motivation*. Northern Ireland Neighbourhood Information Service. Retrieved from <http://www.ninis2.nisra.gov.uk/public/Home.aspx>
- NSD. (2017). *The MacroDataGuide*. Norwegian Centre for Research Data. Retrieved from <http://www.nsd.uib.no/macrodataloguide/index.html>
- Öberg, M., & Sollenberg, M. (2011). Gathering conflict information using news resources. In K. Höglund & M. Öberg (Eds.), *Understanding peace research: Methods and challenges* (pp. 47–73). London, UK: Routledge.
- Okello, J., Onen, T. S., & Musisi, S. (2007). Psychiatric disorders among war-abducted and non-abducted adolescents in Gulu district, Uganda: A comparative study. *African Journal of Psychiatry*, **10**(4), 225–231. <https://doi.org/10.4314/ajpsy.v10i4.30260>
- O'Neill, S. (2006, August). Exclusive: 1 in 10 sectarian crimes end in court. *The Irish News*.
- Paardekooper, B., De Jong, J. T. V. M., & Hermanns, J. M. A. (1999). The psychological impact of war and the refugee situation on South Sudanese children in refugee camps in Northern Uganda: An exploratory study. *The Journal of Child Psychology and Psychiatry and Allied Disciplines*, **40**(4), 529–536. <https://doi.org/10.1111/1469-7610.00471>
- Paisley, I. (March 26, 2007). Ian Paisley's statement in full. *BBC News*. Retrieved from http://news.bbc.co.uk/2/hi/uk_news/northern_ireland/6495953.stm
- Panter-Brick, C., Eggerman, M., Gonzalez, V., & Safdar, S. (2009). Violence, suffering, and mental health in Afghanistan: A school-based survey. *The Lancet*, **374**(9692), 807–816. [https://doi.org/10.1016/S0140-6736\(09\)61080-1](https://doi.org/10.1016/S0140-6736(09)61080-1)
- Park, I. J. K., Wang, L., Williams, D. R., & Alegría, M. (2017). Coping with racism: Moderators of the discrimination-adjustment link among Mexican-origin adolescents. *Child Development*, **89**(3), 293–310. <https://doi.org/10.1111/cdev.12856>
- Pascoe, E. A., & Richman, L. S. (2009). Perceived discrimination and health: A meta-analytic review. *Psychological Bulletin*, **135**(4), 531–554. <https://doi.org/10.1037/a0016059>
- Peace process bodies dissolve. (2011, April). *The Irish News*.
- Peace Shattered—Latest military “soft target” to be attacked. (2009, March). *The Irish News*.
- Peltonen, K., Qouta, S., El Sarraj, E., & Punamäki, R. L. (2010). Military trauma and social development: The moderating and mediating roles of peer and sibling relations in mental health. *International Journal of Behavioral Development*, **34**(6), 554–563. <https://doi.org/10.1177/0165025410368943>
- Perkins, D. D., & Taylor, R. B. (1996). Ecological assessments of community disorder: Their relationship to fear of crime and theoretical implications. *American Journal of Community Psychology*, **24**(1), 63–107. <https://doi.org/10.1007/BF02511883>
- Peteet, J. (1994). Male gender and rituals of resistance in the Palestinian *intifada*: A cultural politics of violence. *American Ethnologist*, **21**(1), 31–49.
- Phoenix, É. (2016, August 25). “Sad tale of bigotry”: Employment at Queen’s University scrutinised. *The Irish Times*. Retrieved from <https://www.irishtimes.com/news/ireland/irish-news/sad-tale-of-bigotry-employment-at-queen-s-university-scrutinised-1.2767337>
- Poole, A. (2011, May). Ronan Kerr’s mum in plea over policing. *Belfast Telegraph*.
- Power, M. (2011). *Building peace in Northern Ireland*. Liverpool: Liverpool University Press.

- Preacher, K. J., Zhang, Z., & Zyphur, M. J. (2016). Multilevel structural equation models for assessing moderation within and across levels of analysis. *Psychological Methods*, **21**(2), 189–205. <https://doi.org/10.1037/met0000052>
- Provo Semtex used in attack. (2008, August). *The Irish News*.
- Qouta, S., Punamäki, R.-L., & El Sarraj, E. (2008). Child development and family mental health in war and military violence: The Palestinian experience. *International Journal of Behavioral Development*, **32**(4), 310–321. <https://doi.org/10.1177/0165025408090973>
- Raudenbush, S. W., & Bryk, A. S. (2002). *Hierarchical linear models: Applications and data analysis methods* (2nd ed.). Thousand Oaks, CA: Sage.
- Raudenbush, S. W., & Sampson, R. J. (1999). Econometrics: Toward a science of assessing ecological settings, with application to the systematic observation of neighborhoods. *Sociological Methodology*, **29**, 1–41. <https://doi.org/10.1111/0081-1750.00059>
- Ricigliano, R. (2012). *Making peace last: A toolbox for sustainable peacebuilding*. New York: Routledge.
- Ritzer, G. (1981). *Toward an integrated sociological paradigm: The search for an exemplar and an image of the subject matter*. Boston, MA: Allyn and Bacon.
- Ritzer, G., & Stepnisky, J. (2014). Micro-macro and agency-structure integration. *Sociological Theory* (9th ed., pp. 487–538). New York, NY: McGraw-Hill.
- Robinson, V. (2011, April). The murder of Constable Ronan Kerr. *The Irish News*.
- Rosen, D. M. (2005). Fighting for the apocalypse: Palestinian child soldiers. In D. M. Rosen (Ed.), *Armies of the young: Child soldiers in war and terrorism* (pp. 91–131). New Brunswick, NJ: Rutgers University Press.
- Rowan, B. (2010, February 8). Weapons handover: INLA and republican splinter group in eleventh hour moves. *Belfast Telegraph*.
- Rudoren, J. (2015, October 13). Leaderless Palestinian youth, inspired by social media, drive rise in violence in Israel. *The New York Times*. Retrieved from http://www.nytimes.com/2015/10/14/world/middleeast/leaderless-palestinian-youth-inspired-by-social-media-drive-a-rise-in-violence.html?_r=0
- Rutherford, A. (2010, October). Family of murder victim in call for fresh inquiry. *Belfast Telegraph*.
- Rusk, D. (2008, September). Arsonists target home of DUP man. *The Irish News*.
- Rusk, D. (2010, February). Deal done. *The Irish News*.
- Sangalang, C. C., & Vang, C. (2017). Intergenerational trauma in refugee families: A systematic review. *Journal of Immigrant and Minority Health*, **19**, 745–754. <https://doi.org/10.1007/s10903-016-0499-7>
- Schiff, M., Benbenishty, R., McKay, M., DeVoe, E., Liu, X., & Hasin, D. (2006). Exposure to terrorism and Israeli youths' psychological distress and alcohol use: An exploratory study. *The American Journal on Addiction*, **15**, 220–226.
- Schulz, M. S., & Waldinger, R. J. (2005). The value of pooling “naïve” expertise: Comment. *American Psychologist*, **60**(6), 656–662. <https://doi.org/10.1037/0003-066X.60.6.656>
- Schwartz, S. (1994). The fallacy of the ecological fallacy: The potential misuse of a concept and the consequences. *American Journal of Public Health*, **84**(5), 819–824. <https://doi.org/10.2105/ajph.84.5.819>
- Security alerts lead to Easter disruption across the province. (2010, April). *Belfast Telegraph*.
- Seddio, K. (2017). Trauma, psychopathology, and the refugee crisis: A call to action. *American Journal of Public Health*, **107**(7), 1044–1045. <https://doi.org/10.2105/AJPH.2017.303857>
- Senehi, J., & Byrne, S. (2006). From violence toward peace: The role of storytelling for youth healing and political empowerment after social conflict. In S. McEvoy-Levy (Ed.), *Troublemakers or peacemakers? Youth and postaccord peace building* (pp. 235–255). Notre Dame, IN: University of Notre Dame Press.
- Seventeen years. (2011, June). Seventeen years on and still nobody has been brought to justice. *Belfast Telegraph*.

- Sharma, M., Fine, S. L., Brennan, R. T., & Betancourt, T. S. (2017). Coping and mental health outcomes among Sierra Leonean war-affected youth: Results from a longitudinal study. *Development and Psychopathology*, **29**(1), 11–23. <https://doi.org/10.1017/S0954579416001073>
- Shaw, J. A. (2003). Children exposed to war/terrorism. *Clinical Child and Family Psychology Review*, **6**, 237–246. <https://doi.org/10.1023/B:CCFP.0000006291.10180.bd>
- Shirazi, R. (2012). Performing the “Knights of Change”: Male youth narratives and practices of citizenship in Jordanian schools. *Comparative Education*, **48**(1), 71–85. <https://doi.org/10.1080/03050068.2011.637764>
- Shirlow, P., & Ellison, G. (2009). *Community attitudes to crime, anti-social behavior and policing in the Greater New Lodge*. Belfast: Institute of Criminology and Criminal Justice, Queen’s University Belfast.
- Shirlow, P., & McEvoy, K. (2008). *Beyond the wire: Former prisoners and conflict transformation in Northern Ireland*. London: Pluto Press.
- Shirlow, P., & Murtagh, B. (2006). *Belfast: Segregation, violence and the city*. London: Pluto Press.
- Shirlow, P., Taylor, L. K., Merrilees, C. E., Goeke-Morey, M. C., & Cummings, E. M. (2013). Hate crime: Record or perception? *Space and Polity*, **17**(2), 237–252.
- Shock. (2006, May). Shock truth of bar killings. *The Irish News*.
- Short Strand. (2011, June). Short Strand Violence—Second night of riots. *The Irish News*.
- Shrout, P. E., & Fleiss, J. L. (1979). Intraclass correlations: Uses in assessing rater reliability. *Psychological Bulletin*, **86**(2), 420–428. <https://psycnet.apa.org/doi/10.1037/0033-2909.86.2.420>
- Simpson, C. (2006, September). £4m cost of attacks just “tip of iceberg”. *The Irish News*.
- Singer, J. D., & Willett, J. B. (2003). *Applied longitudinal data analysis: Methods for studying change and event occurrence*. Oxford: Oxford University Press.
- Sisk, T. D. (2006). Political violence and peace accords: Searching for the silver lining. In J. Darby (Ed.), *Violence and reconstruction* (pp. 121–142). Notre Dame, IN: Notre Dame University Press.
- Slone, M., Lobel, T., & Gilat, I. (1999). Dimensions of the political environment affecting children’s mental health: An Israeli study. *Journal of Conflict Resolution*, **43**(1), 78–91. <https://doi.org/10.1177/0022002799043001005>
- Smith, P., Perrin, S., Yule, W., Hacam, B., & Stuvland, R. (2002). War exposure among children from Bosnia-Herzegovina: Psychological adjustment in a community sample. *Journal of Traumatic Stress*, **15**(2), 147–156. <https://doi.org/10.1023/A:1014812209051>
- Smyth, L. (2009, July). Third attack on Orange Hall carried out by “sick vermin”. *Belfast Telegraph*.
- Social Development. (2016). *Wiley Online Library*. Retrieved from [http://onlinelibrary.wiley.com/journal/10.1111/\(ISSN\)1467-9507/homepage/ProductInformation.html](http://onlinelibrary.wiley.com/journal/10.1111/(ISSN)1467-9507/homepage/ProductInformation.html)
- Sparman, A. (2005). Video recording as interaction: Participant observation of children’s everyday life. *Qualitative Research in Psychology*, **2**(3), 241–255. <https://doi.org/10.1191/1478088705qp0410a>
- Stevenson, C., Condor, S., & Abell, J. (2007). The minority-majority conundrum in Northern Ireland: An Orange Order perspective. *Political Psychology*, **28**(1), 105–125. <https://doi.org/10.1111/j.1467-9221.2007.00554.x>
- Taylor, L. K. (2020). The Developmental Peacebuilding Model (DPM) of children’s prosocial behaviors in settings of intergroup conflict. *Child Development Perspectives*, **14**(3), 127–134. <https://doi.org/10.1111/cdep.12377>
- Taylor, L. K., Merrilees, C. E., Baird, R., Goeke-Morey, M. C., Shirlow, P., & Cummings, E. M. (2018). Impact of political conflict on trajectories of adolescent prosocial behavior: Implications for civic engagement. *Developmental Psychology*, **54**(9), 1785–1794. <https://doi.org/10.1037/dev0000552>
- Taylor, L. K., Merrilees, C. E., Cairns, E., Shirlow, P., Goeke-Morey, M., & Cummings, E. M. (2013). Risk and resilience: The moderating role of social coping for maternal mental health in a setting of political conflict. *International Journal of Psychology*, **48**(4), 591–603. <https://doi.org/10.1080/00207594.2012.658055>

- Taylor, L. K., Merrilees, C. E., Campbell, A., Shirlow, P., Cairns, E., Goeke-Morey, M. C., ..., Cummings, E. M. (2011). Sectarian and nonsectarian violence: Mothers' appraisals of political conflict in Northern Ireland. *Peace and Conflict: Journal of Peace Psychology*, **17**(4), 343–366. <https://doi.org/10.1080/10781919.2011.610199>
- Taylor, L. K., Merrilees, C. E., Corkalo Biruski, D., Ajdukovic, D., & Cummings, E. M. (2017). Complexity of risk: Mixed methods approach to understanding youth risk and insecurity postconflict settings. *Journal of Adolescent Research*, **32**(5), 585–613. <https://doi.org/10.1177/0743558416684950>
- Taylor, L. K., Merrilees, C. E., Goeke-Morey, M. C., Shirlow, P., Cairns, E., & Cummings, E. M. (2014). Political violence and adolescent out-group attitudes and prosocial behaviors: Implications for positive inter-group relations. *Social Development*, **23**(4), 840–859. <https://doi.org/10.1111/sode.12074>
- Taylor, L. K., Merrilees, C. E., Goeke-Morey, M. C., Shirlow, P., & Cummings, E. M. (2016). Trajectories of adolescent aggression and family cohesion: The potential to perpetuate or ameliorate political conflict. *Journal of Clinical Child and Adolescent Psychology*, **45**(2), 114–28. <https://doi.org/10.1080/15374416.2014.945213>
- Taylor, L. K., Townsend, D., Merrilees, C. E., Goeke-Morey, M. C., Shirlow, P., & Cummings, E. M. (2019). Adolescent civic engagement and perceived political conflict: The role of family cohesion. *Youth & Society*, **51**(5), 616–637. <https://doi.org/10.1177/0044118X17697236>
- Terrorists “fill policing vacuum in poor areas”. (2011, February). *Belfast Telegraph*.
- Thabet, A. A. M., Abed, Y., & Vostanis, P. (2004). Comorbidity of PTSD and depression among refugee children during war conflict. *Journal of Child Psychology and Psychiatry*, **45**(3), 533–542. <https://doi.org/10.1111/j.1469-7610.2004.00243.x>
- Thabet, A. A. M., Karim, K., & Vostanis, P. (2006). Trauma exposure in pre-school children in a war zone. *The British Journal of Psychiatry*, **188**, 154–158. <https://doi.org/10.1192/bjp.188.2.154>
- The situation is serious, we may need Army back. (2009, October). *Belfast Telegraph*.
- There is no doubt more police officers will die. (2009, November). *Belfast Telegraph*.
- This is a frightening time to be a police officer. (2010, March). *Belfast Telegraph*.
- Thornton, C. (2007, July). Pack up your troubles; Army closes the gates on its longest mission. *Belfast Telegraph*.
- Time will tell if this armed struggle is really over. (2009, October). *Belfast Telegraph*.
- Timeline. (n.d.). *Timeline of the Northern Ireland Troubles and peace process*. Military Wiki. Retrieved from https://military.wikia.org/wiki/Timeline_of_the_Northern_Ireland_Troubles_and_peace_process
- Topping, J. R. (2008). Diversifying from within: Community policing and the governance of security in Northern Ireland. *British Journal of Criminology*, **48**(6), 778–797. <https://doi.org/10.1093/bjc/azn064>
- Topping, J. R., & Byrne, J. (2012). Paramilitary punishments in Belfast: Policing beneath the peace. *Behavioral Sciences of Terrorism and Political Aggression*, **4**(1), 41–59. <https://doi.org/10.1080/19434472.2011.631349>
- Townsend, D., Taylor, L. K., Furey, A., Merrilees, C. E., Goeke-Morey, M. C., Shirlow, P., & Cummings, E. M. (2016). Measuring the macrosystem in postaccord Northern Ireland: A social-ecological approach. *Peace and Conflict: Journal of Peace Psychology*, **22**(3), 282–286. <https://doi.org/10.1037/pac0000185>
- Townsend, D. L. (2016). Political violence in the macrosystem: A thematic analysis of Northern Irish newspapers (Unpublished master's thesis). University of Notre Dame, Notre Dame, IN.
- Treat dissident gangs like al-Qaida, PM urged. (2011, May). *Belfast Telegraph*.
- Trenz, H. J. (2004). Media coverage on European governance: Exploring the European public sphere in national quality newspapers. *European Journal of Communication*, **19**(3), 291–319. <https://doi.org/10.1177/0267323104045257>

- Tudge, J. R. H., Mokrova, I., Hatfield, B. E., & Karnik, R. B. (2009). Uses and misuses of Bronfenbrenner's Bioecological Theory of Human Development. *Journal of Family Theory & Review*, **1**, 198–210. <https://doi.org/10.1177/0267323104045257>
- Tudge, J. R. H., Payir, A., Merçon-Vargas, E., Cao, H., & Liang, Y. (2016). Still misused after all these years? A reevaluation of the uses of Bronfenbrenner's bioecological theory of human development. *Journal of Family Theory & Review*, **8**(4), 427–445. <https://doi.org/10.1111/jftr.12165>
- UNHCR. (2017). *Population statistics*. Retrieved from <http://popstats.unhcr.org/en/demographics>
- UNHCR. (2018). *Global trends: Forced displacement in 2017*. Geneva: United Nations High Commissioner for Refugees. Retrieved from <http://www.unhcr.org/5b27be547>
- United Nations. (July 30, 2018). *Report of the Special Representative of the Secretary-General for Children and Armed Conflict, A/73/278*. Retrieved from <https://childrenandarmedconflict.un.org/virtual-library>
- UVF stands down: Leaders say grouping will adopt a non-military role. (2007, May). *The Irish News*.
- Vizek-Vidović, V., Kuterovac-Jagodić, G., & Arambašić, L. (2000). Posttraumatic symptomatology in children exposed to war. *Scandinavian Journal of Psychology*, **41**(4), 297–306. <https://doi.org/10.1111/1467-9450.00202>
- Volling, B. L., Cabrera, N. J., Feinberg, M. E., Jones, D. E., McDaniel, B. T., Liu, S., ..., Cookston, J. T. (2019). Advancing research and measurement on fathering and children's development. *Monographs of the Society for Research in Child Development*, **84**, 7–160. <https://doi.org/10.1111/mono.12404>
- Waldinger, R. J., Schulz, M. S., Hauser, S. T., Allen, J. P., & Crowell, J. A. (2004). Reading others' emotions: The role of intuitive judgments in predicting marital satisfaction, quality, and stability. *Journal of Family Psychology*, **18**(1), 58–71. <https://doi.org/10.1037/0893-3200.18.1.58>
- Wang, L., & Maxwell, S. E. (2015). On disaggregating between-person and within-person effects with longitudinal data using multilevel models. *Psychological Methods*, **20**(1), 63–83. <https://doi.org/10.1037/met0000030>
- Weapons move means it's a good day for peace process. (2009, June). *Belfast Telegraph*.
- Weis, L., & Fine, M. (2012). Critical bifocality and circuits of privilege: Expanding critical ethnographic theory and design. *Harvard Educational Review*, **82**(2), 173–201. <https://doi.org/10.17763/haer.82.2.vljx34n441532242>
- Weisner, T. S. (1997). The ecocultural project of human development: Why ethnography and its findings matter. *Ethos*, **25**(2), 177–190. <https://doi.org/10.1525/eth.1997.25.2.177>
- Wessells, M. G., Lamin, D. F. M., King, D., Kostelny, K., Stark, L., & Lilley, S. (2015). The limits of top-down approaches to managing diversity: Lessons from the case of child protection and child rights in Sierra Leone. *Peace and Conflict: Journal of Peace Psychology*, **21**(4), 574–588. <https://doi.org/10.1037/pac0000130>
- White, B. (2015, October 16). Palestinian youth and the “force of disobedience.” *Middle East Monitor*. Retrieved from <https://www.middleeastmonitor.com/articles/debate/21726-palestinian-youth-and-the-force-of-disobedience>
- White, T. J. (2011). Consolidating peace and democracy in Northern Ireland: The role of civil society. *Dynamics of Asymmetric Conflict: Pathways toward Terrorism and Genocide*, **4**(3), 259–271. <https://doi.org/10.1080/17467586.2011.635674>
- Whiting, S. A. (2015). *Spoiling the peace: The threat of dissident Republicans to peace in Northern Ireland*. Manchester: Manchester University Press.
- Why we like to pretend killers have gone away. (2010, June). *Belfast Telegraph*.

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Supporting Information

Additional supporting information may be found online (<https://doi.org/10.1111/mono.12423>) in the Supporting Information section at the end of the article.

Appendix

APPENDIX A: NEWSPAPER CODING INSTRUCTIONS

1. *Before coding begins, organize a meeting with the coders to explain the overall goal*

We are trying to assess intergroup relations at the country-wide level. Although we recognize that relations differ between communities within Northern Ireland, the goal of the current newspaper measure is to assess the *overall* relations between Catholics and Protestants for all of Northern Ireland. This “macro-level measure” will reflect the general level of ethnic conflict, political tension, threat, positive relations, and progress as reflected in speeches by politicians, notable violent incidents that make the news, and related indicators (such as news about the Police Service of Northern Ireland).

2. *Explain the newspaper article selection process*

Newspaper articles were randomly chosen from a subset of articles in two major newspapers (*The Belfast Telegraph* and the *Irish News*). The coders will read each article and answer 7 questions about how much the article represents political tension or positive relations between Catholics and Protestants in Northern Ireland, and threat or benefit to one of these groups. Coders should keep in mind that we do not want to know how they think the article affects people after reading it. We want to know how much they believe the content of the article reflects tensions as described above.

3. *Review the 7 coding items*

1. Thinking about the overall impact of the article, would you say it mostly reflects negative or positive relations between Catholics and Protestants? (0 = *Negative*, 1 = *Positive*)
2. How much do you think this article reflects political tensions between Catholics and Protestants? (0 = *Not at all*, 2 = *Moderately*, 4 = *Very much*)
3. How much does this article reflect positive relations between Catholics and Protestants? (0 = *Not at all*, 2 = *Moderately*, 4 = *Very much*)
4. Thinking about the overall impact of the article, how much would you say it reflects/indicates a threat or negative and detrimental impact to Catholics specifically? (0 = *Not at all*, 2 = *Moderately*, 4 = *Very much*)
5. Thinking about the overall impact of the article, how much would you say it reflects/indicates a threat or negative and detrimental impact to Protestants specifically? (0 = *Not at all*, 2 = *Moderately*, 4 = *Very much*)

6. Thinking about the overall impact of the article, how much would you say it indicates benefits, growth, or progress for Catholics, specifically? (0 = *Not at all*, 2 = *Moderately*, 4 = *Very much*)
7. Thinking about the overall impact of the article, how much would you say it indicates benefits, growth, or progress for Protestants, specifically? (0 = *Not at all*, 2 = *Moderately*, 4 = *Very much*)

4. *Provide examples*

Go over an example of the categories. The examples are simply to give the coders an idea about what we mean by the article reflecting tension, positive relations, etc. The two articles provided are extreme examples, and hopefully less ambiguous. (As you read them you can see that the first one would be an example of tension and the second is an example of positive relations.) Ask the coders to independently read the articles and answer the 7 questions. Discuss the answers as a group and figure out why they are disagreeing if at all. For example, do they disagree simply in the degree of positivity or negativity, or do they disagree in terms of what the question is asking. We expect some disagreement in degree, which is why we are averaging over ratings; however, we want to make sure there is general agreement about what they are being asked to do. If we need more examples to make that clear I can provide some.

Example 1: Political Tension

Headline: 1 arrest during parade trouble

Body: Police arrested a man in Ballymena as they moved republican protestors back when a loyalist band parade passed through the Co Antrim town. Republicans gathered near Market Road as the “Pride of the Maine” band in the town held its 30th anniversary march on Saturday. As police pushed back protestors they used jeeps to block both the Cushendall Road and Broughshane Road beside All Saints Catholic Church for a time. Traditionally loyalist band parades and other loyalist marches have passed along either Market Road or through nearby William Street which houses several pubs, many of which are mainly frequented by Catholics. But tension has been brewing in recent years with first Sinn Fein and now the SDLP saying loyalist band parades should not go along the routes. The nationalist parties say a parallel route which opened in recent years—the Parkway dual-carriageway—should be used for parades. Sinn Fein’s North Antrim assembly member Philip McGuigan said: “This was a disgrace from start to finish. It is quite evident the police have not changed as they forced through a sectarian parade and lashed out at nationalists.” North Antrim SDLP assembly member Sean Farren said: “Parkway would be preferable but the time this parade passed through this area, after 11 pm, is also unacceptable, in a residential

area.” Former Independent Unionist councillor Willie Wright, now a member of the Ulster Human Rights Watch, said: “Most of that route is now occupied by Portuguese workers.” And he added: “The parade went very well. The police did a good job. Some nationalists didn’t listen to the police and they got pushed along. But all the bands and their supporters were very well behaved.”

Example 2: Positive Relations

Headline: Village goes really wild for flowers;

Body: NEWBUILDINGS—the village branded the most sectarian place in Northern Ireland in a recent newspaper article—is going really wild today in a cross-community project. Pupils from both Newbuildings Primary School and St Columba’s School, on the outskirts of Londonderry, will launch the project by together planting a wildflower field beside the main road. Members of the Sai Pak (North West) Chinese Community will help with the launch. A wide variety of wildflower species will be planted in the field to highlight the diversity and variety of traditions and beliefs in the Newbuildings area. Londonderry community relations officer Sue Gallagher said: “This project will hopefully help children understand and celebrate diversity by getting involved in a fun project together.” Jeanette Warke, of Derry City Council’s Shared City Project, said yesterday: “We want this wildflower field to help improve the image of Newbuildings along the Main Road while creating a bit of community spirit and involvement at the same time.” A sign will be erected in the children’s diversity field which will read: “People are like flowers. “Different colours, shapes and styles, yet all part of the same world. All individual, unique and special yet all capable of bringing a smile to our lives.”